

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HUAWEI TECHNOLOGIES CO. LTD.,

Plaintiff,

v.

VERIZON COMMUNICATIONS, INC., et al.

Defendants.

No. 2:20-cv-030-JRG

Jury Trial Demanded

VERIZON BUSINESS NETWORK
SERVICES, INC., et al.

Counterclaim-Plaintiffs,

v.

HUAWEI TECHNOLOGIES CO. LTD.,
et al.

Counterclaim-Defendants.

**PLAINTIFF HUAWEI TECHNOLOGIES CO. LTD.'S CORRECTED PROPOSED
FINDINGS OF FACT AND CONCLUSIONS OF LAW
CONCERNING EQUITABLE DEFENSES**

[REDACTED]
PUBLIC VERSION

I. INTRODUCTION

Plaintiff Huawei Technologies Co. Ltd. (“Huawei”) hereby files its proposed findings of fact and conclusions of law. Huawei specifically proposes findings for Verizon Communication Inc.’s (“Verizon”) equitable defenses of: (i) waiver, implied waiver, acquiescence, equitable estoppel, unclean hands, patent misuse, unfair competition and/or fraud based on standards activities; (ii) license, implied license, or patent exhaustion; (iii) inequitable conduct; (iv) 35 U.S.C. § 101; and (v) 28 U.S.C. § 1498. Huawei also proposes findings against Verizon for (i) an exceptional case warranting attorneys’ fees; (ii) applicability and consequences of Swiss law; (iii) unclean hands; (iv) statute of limitations; (v) 35 U.S.C. § 101; and (vi) absence of Huawei’s duty to disclose patent identities.

II. PROPOSED FINDINGS OF FACT

A. The Parties

1. Plaintiff Huawei is a Chinese corporation with its principal place of business at Bantian, Longgang District, Shenzhen, People’s Republic of China.

2. Defendant Verizon is a Delaware corporation with its principal place of business at 1095 Avenue of the Americas, New York, NY 10036. Verizon has designated The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801 as its agent for service of process.

3. Defendant Verizon Business Network Services, Inc. is a Delaware corporation with its principal place of business at 22001 Loudoun County Parkway, Ashburn, Virginia 20147. Verizon Business Network Services, Inc. has designated CT Corporation System, 1999 Bryan St., Suite 900, Dallas, Texas 75201 as its agent for service of process.

4. Defendant Verizon Enterprise Solutions LLC is not an active entity.

5. Defendant Cellco Partnership d/b/a Verizon Wireless, Inc. is a General Partnership with its principal place of business at One Verizon Way, Basking Ridge, New Jersey 07920. Cellco Partnership d/b/a Verizon Wireless, Inc. has designated The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801 as its agent for service of process.

6. Defendant Verizon Data Services LLC is a Delaware limited liability company with its principal place of business at One East Telecom Parkway, B3E, Temple Terrace, Florida 33637. Verizon Data Services LLC has designated CT Corporation System, 1999 Bryan St., Suite 900, Dallas, Texas 75201 as its agent for service of process.

7. Defendant Verizon Business Global, LLC is a Delaware corporation with its principal place of business at One Verizon Way, Basking Ridge, New Jersey. Verizon Business Global, LLC may be served with process via its registered agent Corporation Trust Company, Corporation Trust Company Center, 1209 Orange Street, Wilmington, Delaware 19801.

8. Defendant Verizon Services Corp. is a Delaware corporation with its principal place of business at 1717 Arch Street, 21st Floor, Philadelphia, PA 19103. Verizon Services Corp. may be served with process via its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

9. Defendant Verizon Patent and Licensing Inc. is a Delaware corporation with its principal place of business at One Verizon Way, Basking Ridge, New Jersey 07920.

B. ITU-T

10. The International Telecommunication Union (ITU) is a specialized agency of the United Nations tasked to “facilitate international connectivity in communications networks.” Since its founding in 1865 as the International Telegraph Union, through the merger between the

International Telegraph Union and the Radio Telegraph Union (founded 1906) in 1934, and through its incorporation into the then newly formed United Nations in 1947, the ITU has worked to allow communications networks (including originally telegraph, then later radio and telecommunications) to work across national boundaries and thus to facilitate communications across the globe. *See* Ex. A (ITU Description).

11. The ITU has a policy titled “Common Patent Policy for ITUT/ITU-R/ISO/IEC” (“Patent Policy”), the sole objective of which is to ensure that a patent embodied in a Recommendation must be accessible to everybody without undue constraints. Ex. B (2007 Patent Policy, Guidelines, Patent Statement and Licensing Declaration Form, and General Patent Statement and Licensing Declaration Form) at 8–9. The Patent Policy is supported by the “Guidelines for Implementation” (“Guidelines”). *Id.* at 1–7. Both documents indicate that a standard is accessible without undue constraints if the owner of a patent that covers the standard has committed to license its patents “free of charge” or on RAND terms. *See, e.g.*, ■■■■■
■■■■■

12. The ITU’s Patent Policy refers to a Patent Statement and Licensing Declaration (PSLD) form for patent owners to disclose patents. Ex. B at 9 ¶ 3. The Guidelines state that the PSLD form is the only means by which a patent holder can disclose their patents. *Id.* at 3–4 ¶ 3–4. The instructions and the form instruct that submitting the form constitutes a disclosure of patents even if individual patent numbers are not listed. *See, e.g., id.* at 11 (“The Patent Holder believes that it holds granted and/or pending applications for patents, the use of which would be required to implement the above document . . .”).

13. The PSLD form provides patent holders with three options:
- a. Provide licenses to standard essential patents royalty-free;

- b. Provide licenses to standard essential patents on a non-discriminatory basis with reasonable terms and conditions (“RAND”); or
- c. Refuse to provide licenses to standard essential patents royalty-free or under RAND terms.

Id. at 11.

14. By its explicit instructions, the PSLD form requires identification of specific patent (and patent application) numbers only where a patent owner selects the third option (i.e., refuse to provide licenses royalty-free or under RAND terms). *Id.*

15. The Guidelines also provide for a General Patent Statement and Licensing Declaration (GPSLD) form, which gives patent holders the voluntary option to make a general licensing declaration regarding material protected by patents contained in any of their contributions. Ex. B at 5 ITU-1.

16. While the Patent Policy does not specify when disclosure at the ITU must take place, the Guidelines specifically contemplate the situation where patents are disclosed after adoption of a recommendation, and in such a situation, further action by the ITU is only required if the patent holder is unwilling to license its patents for free or based on RAND terms. *Id.* at 3 ¶ 3.

17. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

C. Huawei's Asserted Patents

i. U.S. Patent No. 9,312,982

18. The '982 Patent, entitled "Method and Apparatus for Mapping and De-Mapping in an Optical Transport Network," describes a way of mapping lower rate traffic into higher rate transport units. It specifies that the mapping should be done in groups of M bytes where M is equal to the number of time slots that will be occupied in the higher rate transport unit. Huawei has asserted that the '982 Patent is essential to the G.709 standard.

19. The '982 Patent issued from U.S. Application No. 14/566,478, which was filed on December 10, 2014 as a continuation of U.S. Application No. 12/712,675, which was filed on February 25, 2010 and claims priority to Chinese Application No. 1 0106028, which was filed on March 9, 2009.

20. The named inventors of the '982 Patent are Maarten Vissers, Qiuyou Wu, Xin Xiao, and Wei Su.

ii. U.S. Patent No. 8,406,236

21. The '236 Patent, entitled "Method and Apparatus for Transporting Client Signal in Optical Transport Network," describes a way of communicating client signal byte number when a client signal (e.g., Internet traffic, phone call) is mapped into a G.709 signal. Huawei has asserted that the '236 Patent is essential to the G.709 standard.

22. The '236 Patent issued from U.S. Application No. 13/109,537, which was filed on May 17, 2011 as a continuation of U.S. Application No. 12/496,039, which was filed on July 1, 2009 as a continuation of PCT Application No. PCT/CN2008/071331, which was filed on June 16, 2008 and claims priority to Chinese Application No 2007 1 0127016, which was filed on June 15, 2007.

23. The named inventors of the '236 Patent are Limin Dong and Qiuyou Wu.

iii. U.S. Patent No. 8,824,505

24. The '505 Patent, entitled "Method and Apparatus for Transporting Client Signals in an Optical Transport Network," describes a way of multiplexing multiple lower rate signals into a higher rate signal (specifically, a 100 Gbps signal). In particular, the asserted claims solve a problem with adapting the prior version of the G.709 standard, which had a maximum signal rate of 40 Gbps, to efficiently transport multiple client signals in a 100 Gbps signal. Huawei has asserted that the '505 Patent is essential to the G.709 standard.

25. The '505 Patent issued from U.S. Application No. 13/281,280, which was filed on October 25, 2011 as a continuation of U.S. Application No. 12/622,973, which was filed on November 20, 2009 as a continuation of PCT Application No. PCT/CN2008/070718, which was filed on April 16, 2008 and claims priority to Chinese Application No. 200710090273, which was filed on April 17, 2007.

26. The named inventors of the '505 are Limin Dong and Qiuyou Wu.

iv. U.S. Patent No. 8,995,253

27. The '253 Patent, entitled "Method, Apparatus and System for Ring Protection," describes a way to manage link failures in an ethernet ring network. Huawei has asserted that the '253 Patent is essential to the G.8032 standard.

28. The '253 Patent issued from U.S. Application No. 13/207,033, which was filed August 10, 2011 as a continuation of U.S. Application No. 12/403,451, which was filed on March 13, 2009 as a continuation of PCT Application No. PCT/CN2008/070158, which was filed on January 22, 2008 and claims priority to Chinese Application No. 200710073031, which was filed on January 23, 2007.

29. The named inventors of the '253 Patent are Hao Long and Yang Yang.

v. U.S. Patent No. 9,014,151

30. The '151 Patent, entitled "Method and Apparatus for Transmitting Low-Rate Traffic Signal in Optical Transport Network," describes a way of more efficiently mapping 1 Gbps ethernet signals into G.709 signals that can double the transported bandwidth. Huawei has asserted that the '151 Patent is essential to the G.709 standard.

31. The '151 Patent issued from U.S. Application No. 11/525,332, which was filed on September 22, 2006 as a continuation of PCT Application No. PCT/CN2005/001239, which was filed on August 11, 2005 and claims priority to Chinese Application No. 2004 1 0059 163, which was filed on August 11, 2004.

32. The named inventor of the '151 Patent is Shimin Zou.

D. Patent Prosecution History

i. U.S. Patent No. 8,406,236

33. On May 17, 2011, the date of the filing of U.S. Patent Application No. 13/109,537, Huawei also submitted an Information Disclosure Statement with the filing of the application. Huawei disclosed the following references in that Information Disclosure Statement:

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials ³	Cite No. ⁴	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-7,260,099	08-21-2007	BROWN, ET AL.	
		US-2005/0117585 A1	06-02-2005	LINKEWITSCH, ET AL.	
		US-2007/0116061 A1	05-24-2007	MEAGHER, ET AL.	
		US-2003/0048813 A1	03-13-2003	LAHAV, ET AL.	
		US-2003/0123493 A1	07-03-2003	TAKAHASHI	
		US-7,028,241	04-11-2006	BLAIR, ET AL.	
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶
		EP 1770886 A1	04-04-2007	FUJITSU LTD.		
		CN 101325465 B	06-15-2007	HUAWEI TECH CO LTD.		ABSTRACT
		CN 1901536 A	01-24-2007	HUAWEI TECH CO LTD.		ABSTRACT
		CN 1879370 A	12-13-2006	INTEL CORP (US)		ABSTRACT
		CN 101155006 A	04-02-2008	HUAWEI TECH CO LTD.		ABSTRACT
		CN 1770673 A	05-10-2006	HUAWEI TECH CO LTD.		ABSTRACT

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				Translation ⁶
		ITU-T, "SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS, Digital terminal equipments - General, Series Y: Global Information Infrastructure, Internet Protocol Aspects and Next-Generation Networks, Internet Protocol Aspects - Transport", Interfaces for the Optical Transport Network (OTN), Corrigendum 1, G.709/Y.1331 Corrigendum 1, pages i-iii and 1-6, (December 2006)				
		ITU-T, "SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS, Digital terminal equipments - General, SERIES Y: GLOBAL INFORMATION INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS AND NEXT GENERATION NETWORKS, Internet Protocol Aspects - Transport", Interfaces for the Optical Transport Network (OTN), G.709/Y.1331, pages i-iv and 1-111, (March 2003)				
		Written Opinion of the International Search Authority (translation) dated (mailed) October 9, 2008, issued in related Application No. PCT/CN2008/071331, filed June 16, 2008, Huawei Technologies Co., Ltd.				
		Supplementary European Search Report dated (mailed) January 19, 2010, issued in related Application No. EP 08757742, filed June 16, 2008; Huawei Technologies Co., Ltd.				
		"Interfaces for the Optical Transport Network (OTN); G.709/Y.1331 (03/03)" ITU-T STANDARD IN FORCE (I), INTERNATIONAL TELECOMMUNICATION UNION, GENEVA, CH, NO. G.709/Y.1331 (03/03), 16 March 2003 (2003-03-16), XP017400848 *chapter 17.1*				
		"G.709 Living List" OTN G.709 ITU-T Study Group 15 Living List Study Points, INTERNATIONAL TELECOMMUNICATION UNION, GENEVA, CH, 01 March 2007 (2007-03-01).				
		Chinese Office Action dated July 10, 2009, in related Chinese Application No. 2007101270169 with English translation				Yes

NON PATENT LITERATURE DOCUMENTS						
		International Search Report from P.R. China in International Application No. PCT/CN2008/071331 mailed October 9, 2008				

34. The first Information Disclosure Statement was accompanied by a cover letter explaining:

Pursuant to 37 C.F.R. §§1.56 and 1.97(b), applicants bring to the Examiner's attention the documents listed on attached Form PTO/SB/08. Copies of the listed U.S. Patent documents are not attached. Copies of the listed documents that are on file with the parent application, U.S. Application No. 12/496,039, filed on July 1, 2009, (11005.0081) are not attached. Copies of all other listed documents (two ITU-T non-patent literature documents) are attached. Applicants respectfully request that the Examiner consider the documents listed on attached Form PTO/SB/08 and indicate that they were considered by making an appropriate notation on this form.

35. With the May 17, 2011 application, Huawei submitted claims 1-15. Claim 1 is reproduced below:

1. A method for transmitting a client signal in an optical transport network (OTN), comprising:
acquiring the client signal;
extracting a client signal clock from the client signal;
generating a client signal byte number Cn transported in an OTN frame period according to a client signal clock and a system clock;
if the Cn transported in the OTN frame needs to be increased, reversing values of a first series of bit positions of a second area in an optical channel payload unit-k (OPUk) of the OTN frame, and filling values of a second series of bit positions of the second area in the OPUk with a Cn filled in a previous OTN frame;
if the Cn transported in the OTN frame needs to be decreased, reversing values of the second series of bit positions of the second area in the OPUk overhead field of the OTN frame, and filling values of the first series of bit positions of the second area in the OPUk with the Cn filled in the previous OTN frame.

36. On August 1, 2011, Huawei submitted a second Information Disclosure Statement to also disclose:

	"Interfaces for the Optical Transport Network (OTN); Corrigendum 1, G.709/Y.1331 Corrigendum (12/06)" ITU-T Recommendation G.709/Y.1331 (2003); Corrigendum 1, INTERNATIONAL TELECOMMUNICATION UNION (ITU), Telecommunication Standardization Sector of ITU, (10 pages)	
--	---	--

37. The second Information Disclosure Statement was accompanied by a cover letter explaining:

A copy of a listed document: ITU-T G.709/Y.1331 Corrigendum 1 (12/2006) is enclosed. Copies of the U.S. patent publications are not enclosed. The remainder of the listed documents are of record in prior application no. 12/496.039, filing date July 1, 2009, upon which Applicants rely for the benefits provided in 35 U.S.C. § 120, and accordingly copies are not enclosed.

38. On September 8, 2011, a notice of publication was entered, and the application was published as US 2011/0217047A1.

39. On February 29, 2012, Huawei submitted a third Information Disclosure Statement to also disclose:

	CN 101155006 A	04/02/2008	Huawei Tech. Co., LTD		Abstract
--	----------------	------------	-----------------------	--	----------

NONPATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			Translation ⁵
		Extended European Search Report dated (mailed) January 20, 2012, issued in related Application No EP 11180134.6 - 2415, Huawei Technologies Co., Ltd.			
		ITU-T, International Telecommunication Union, ITU-T G.709/Y.1331, Series G: Transmission Systems and Media, Digital Systems and Networks, Digital terminal equipments - General, Series Y: Global Information Infrastructure, Internet Protocol Aspects and Next Generation Networks, Internet Protocol Aspects - Transport, Interfaces for Optical Transport Network (OTN), March 2003.			

40. The third Information Disclosure Statement was accompanied by a cover letter explaining:

Copies of the listed foreign and non-patent literature documents are attached.

English translations of the non-English documents are enclosed.

The enclosed foreign office action and/or opinion issued in a counterpart international or foreign application cites and discusses one or more documents that were previously cited. Accordingly, these documents are not cited in the attached form and copies are not submitted herewith.

41. On October 24, 2012, the Examiner entered the first Office Action (a non-final rejection). Claims 1-15 were rejected on the ground of non-statutory obviousness-type double patenting over claims of U.S. 7,978,712 (referred to as “Dong” by the Examiner). The ’712 Patent issued from the above-mentioned U.S. Application No. 12/496,039 (filed on July 1, 2009), which is the application from which the ’537 Application was filed as a continuation.

42. As an example, for claim 1, the Examiner stated:

2. **Claim 1** is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4 of parent U.S. Patent No. US 7,978,712 (hereinafter refers as **Dong**).

Note that the applicant filing of the continuing application is voluntary and not the direct, unmodified result of restriction requirement under 35 U.S.C. 121 (i.e. without a

restriction requirement by the examiner) and the claims of the second application are drawn to the “same invention ” as the first application or patent.

Regarding claim 1, although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the instant application scope is substantially the same as the scope of the claims 1 and 4 of the Dong Patent.

Instant Application	US 7,978,712 (dong)	Remarks
<p>1. A method for transmitting a client signal in an optical transport network (OTN), comprising:</p> <p>acquiring the client signal; extracting a client signal clock from the client signal;</p> <p>generating a client signal byte number Cn transported in an OTN frame period according to a client signal clock and a system clock;</p> <p>if the Cn transported in the OTN frame needs to be increased, reversing, values of a first series of bit positions of a second area in an optical channel payload unit-k (OPUk) of the OTN frame, and filling values of a second series of bit positions of the second area in the OPUk with a Cn filled in a previous OTN frame;</p> <p>if the Cn transported in the OTN frame needs to be decreased, reversing, values of the second series of bit positions of the second area in the OPUk overhead field of the OTN frame, and filling values of the first series of bit positions of the second area in</p>	<p>1. A method for transmitting a client signal in an optical transport network (OTN), comprising:</p> <p>acquiring the client signal; extracting a client signal clock from the client signal;</p> <p>generating a client signal byte number Cn transported in an OTN frame period according to the client signal clock and a system clock;</p> <p><i>determining whether the client signal byte number Cn exceeds a range of client signal byte number transported in an OTN frame period;</i></p> <p><i>if the Cn of the OTN frame falls in the range, identifying the Cn is normal in a first area in an optical channel payload unit-k (OPUk) overhead field of the OTN frame and filling a second area in the OPUk overhead field of the OTN frame with the a Cn filled in a previous OTN frame.</i></p> <p>4. The method according to claim 1, further comprising:</p> <p>reversing, if the Cn transported in the OTN frame needs to be increased, values</p>	Instant Application claim1 is substantially the same as claim 1 and 4 of Dong.

<p>the OPUk with the Cn filled in the previous OTN frame.</p>	<p>of a first series of bit positions of the second area in the OPUk overhead field of the OTN frame, and Cn filled before reversing the values of the bit positions of the second area is increased by one unit value in the next OTN frame; and</p> <p>reversing, if the Cn transported in the OTN frame needs to be decreased, values of a second series of bit positions of the second area in the OPUk overhead field of the OTN frame, and Cn filled before reversing the values of the bit positions of the second area is decreased by one unit value in the next OTN frame.</p>	
---	--	--

In view of the above, it is clear that the conflicting claims are not patentably distinct from each other because claim 1 the instant application scope is substantially the same as the scope of the claims 1 and 4 of the Dong Patent.

43. The Office Action indicated that a terminal disclaimer could be filed to overcome the non-statutory obviousness-type double patenting rejection.

44. Additionally, in the October 24, 2011 Office Action, claim 14 was rejected under 35 U.S.C. § 101 for reciting a computer readable medium without specifying that the medium was non-transitory. The Examiner suggested the addition of the term “non-transitory” to the claim to overcome the rejection.

45. The October 24, 2011 Office Action also stated the following about prior art made of record:

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: **Brown** et al. (US 7,260,099 B1), **Linkewitsch** et al. (US 2005/0117585 A1), and **Meagher** et al. (US 2007/0116061 A1).

46. Relatedly, on October 24, 2011, the Examiner entered three Lists of References Cited by the Applicant, which corresponded to the three Information Disclosure Statements, with annotations that the Examiner considered all references (no references were lined through):

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.O./

47. Also, on October 24, 2011, the Examiner entered a List of References Cited by the Examiner:

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination	
		13/109,537	DONG ET AL.	
Examiner		Art Unit		Page 1 of 1
U.S. PATENT DOCUMENTS				
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name
*	A	US-7,260,099	08-2007	Brown et al.
*	B	US-2005/0117585	06-2005	Linkewitsch et al.
*	C	US-2007/0116061	05-2007	Meagher et al.
	D	US-		

48. On January 8, 2013, Huawei filed a Response with a terminal disclaimer to overcome the double patenting rejection over the '712 Patent:

TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT		Docket Number (Optional) 81302586US06
<p>In re Application of: Limin Dong</p> <p>Application No.: 13/109,537</p> <p>Filed: May 17, 2011</p> <p>For: METHOD AND APPARATUS FOR TRANSPORTING CLIENT SIGNAL IN OPTICAL TRANSPORT NETWORK</p> <p>The owner*, <u>HUAWEI TECHNOLOGIES CO., LTD.</u>, of <u>100</u> percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent No. <u>7,978,712</u> as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.</p> <p>In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:</p> <ul style="list-style-type: none"> expires for failure to pay a maintenance fee; is held unenforceable; is found invalid by a court of competent jurisdiction; is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; has all claims canceled by a reexamination certificate; is reissued; or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer. 		

49. In the January 8, 2013 Response, Huawei also submitted minor amendments to claims 13 (putting “OTN” in parenthesis in the preamble) and 15 (changing “component” to “apparatus” in the preamble and adding the word “and” before the last element). Huawei also submitted amendments to claim 14 to overcome the § 101 rejection:

14. (Currently Amended) A computer program product comprising a non-transitory computer readable storage medium, comprising a storing program computer executable instructions thereon for performing a method that comprises adapted to execute the step:

50. On January 13, 2013, the terminal disclaimer was approved.
51. On February 13, 2013, a Notice of Allowance was entered by the Examiner, allowing claims 1-15. The Examiner stated:

3. Claims 1-15 are allowable over the prior art of record since references taken individually or in combination fails to particularly disclose A method for transporting a client signal in an optical transport network (OTN) includes steps as follows. A byte number Cn of a client signal transported in a current OTN frame period is generated according to a client signal clock and a system clock. If the Cn of the current OTN frame falls in a certain range, a predetermined area in an optical channel payload unit-k (OPUk) overhead field is identified as normal and the Cn is filled in the OPUk overhead field of the current OTN frame. Therefore, the reliability for transporting the client byte number can be improved and an OPUk overhead byte space needed for transporting the client signal byte number can be saved.

52. The Examiner's statement of allowance appears to be the same as the '712 Patent's Notice of Allowance with the claim numbers adjusted (see below). However, the '236 Patent's independent claims (all of which were allowed) did not include a claim with just these steps or functional capabilities.

53. On February 22, 2013, the issue fee was paid.

54. On March 26, 2013, the application was granted and issued as the '236 Patent.

55. Referring back to the '712 Patent, the application that matured into the '712 Patent was filed on July 1, 2009. It was submitted with a first Information Disclosure Statement on the same day, including copies of non-patent literature and foreign documents and their translations.

56. On December 7, 2009, Huawei submitted a second Information Disclosure Statement in the '712 Patent's file and enclosed additional references.

57. On January 11, 2011, Huawei submitted a third Information Disclosure Statement in the '712 Patent's filed and enclosed additional references.

58. On February 17, 2011, the Examiner also entered the considered list of references cited by Huawei and the list of references cited by the Examiner. The Examiner entered a Notice of Allowance subject to an Examiner's Amendment. The Examiner's amendments to claims 1 and 4 of the application for the '712 Patent are reproduced below:

1. (Currently Amended) A method for transmitting a client signal in an optical transport network (OTN), comprising:

acquiring the client signal;

extracting a client signal clock from the client signal;

generating a client signal byte number Cn transported in an OTN frame period according to the client signal clock and a system clock;

determining whether the client signal byte number Cn exceeds a range of client signal byte number transported in an OTN frame period;

identifying the Cn if in a first area in an optical channel payload unit-k (OPUk) overhead field of the OTN frame is normal, if the Cn of the OTN frame falls in the range; and

~~filling, if the first area in the OPUk overhead field of the OTN frame is normal and if the Cn of the OTN frame falls in the range, a second area in the OPUk overhead field of the current OTN frame with the Cn filled in a previous OTN frame.~~

4. (Currently Amended) The method according to claim 1, further comprising:

reversing, if the Cn transported in the OTN frame needs to be increased, values of a first series of bit positions of the second area in the OPUk overhead field of the OTN frame ~~according to a preset rule~~, and Cn filled before reversing the values of the bit positions of the second area is increased by one unit value in the next OTN frame; and

reversing, if the Cn transported in the OTN frame needs to be decreased, values of a second series of bit positions of the second area in the OPUk overhead field of the OTN frame ~~according to a preset rule~~, and Cn filled before reversing the values of the bit positions of the second area is decreased by one unit value in the next OTN frame.

59. The Notice of Allowance stated:

3. Claims 1-20 are allowable over the prior art of record since references taken individually or in combination fails to particularly disclose A method for transporting a client signal in an optical transport network (OTN) includes steps as follows. A byte number Cn of a client signal transported in a current OTN frame period is generated according to a client signal clock and a system clock. If the Cn of the current OTN frame falls in a certain range, a predetermined area in an optical channel payload unit-k

(OPUk) overhead field is identified as normal, and the Cn is filled in the OPUk overhead field of the current OTN frame. Therefore, the reliability for transporting the client byte number can be improved and an OPUk overhead byte space needed for transporting the client signal byte number can be saved.

60. As noted above, the Notice of Allowance in the '236 Patent file appears to have inadvertently copied from this one for the '712 Patent. These steps are reflected in claim 1 of the '712 Patent.

61. On March 10, 2011, Huawei entered an Amendment After Notice of Allowance to reflect the amendments from the Examiner's amendment.

62. On April 1, 2011, the Examiner entered the amendment.

63. On July 12, 2011, the application issued as the '712 Patent. Claims 1 and 4 were those depicted above in the '236 Patent's double-patenting rejection.

ii. U.S. Patent No. 8,995,253

64. With the filing of U.S. Application No. 13/207,033 on August 10, 2011, Huawei also submitted an Information Disclosure Statement. Huawei disclosed the following references in that Information Disclosure Statement:

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials ²	Cite No. ¹	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ³ (if known)			
		US-6,766,482 B1	07-20-2004	Yip et al.	
		US-6,801,506 B1	10-05-2004	Dey	
		US-2005/0207348 A1	09-22-2005	Tsurumi et al.	
		US-			
		US-			
		US-			

Note: Copies of the U.S. Patent Documents are not Required in IDS filed after October 21, 2004

FOREIGN PATENT DOCUMENTS						
Examiner Initials ²	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		CN 1812361 A	08-02-2006	HUAWEI SAKANG TECH CO LTD [CN]		Partial
		WO 03/077459 A2	09-18-2003	FOUNDRY NETWORKS INC.		
		CN 1543136 A	11-03-2004	WUHAN FENGHUO NETWORKS CO LTD		Abstract
		CN 1812300 A	08-02-2006	HARBOUR NETWORKS CO LTD		Abstract
		EP 1 729 453 A1	12-06-2006	SIEMENS AKTIENGESELLSCHAFT		

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				Translation ⁶
		ITU-T TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU, "SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS, Packet over Transport aspects - Ethernet over Transport aspects, SERIES Y: GLOBAL INFORMATION INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS AND NEXT-GENERATION NETWORKS", G.8032/Y.1344, pages i-iv and 1-91, (March 2010)				
		PCT International Preliminary Report on Patentability which encloses an English Translation of the PCT Written Opinion of the International Searching Authority for International Application No. PCT/CN2008/070158, mailed May 8, 2008, 5 pgs.				
		First Office Action from the State Intellectual Property Office of the PRC for Application No. 2007100730292, dated September 10, 2007, 8 pgs.			YES	
		First Chinese Office Action dated (mailed) September 14, 2010, issued in related Chinese Application No. 200880001030.7, Huawei Technologies C., LTD (4 pages)			Partial	
		Supplementary European Search Report mailed July 14, 2009, in EP Application No. 0870014.0-2416.				
		International Search Report from P.R. China in International Application No. PCT/CN2008/070158 mailed May 8, 2008				

65. The first Information Disclosure Statement was accompanied by a cover letter explaining:

Pursuant to 37 C.F.R. §§1.56 and 1.97(b), applicants bring to the Examiner's attention the documents listed on attached Form PTO/SB/08. Copies of the listed U.S. Patent documents are not attached. Copies of the listed documents are on file with the parent application, U.S. Application No. 12/403,451 , filed on March 13, 2009, and are not attached. A copy of the non-patent literature (ITU-T TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU) is attached. Applicants respectfully request that the Examiner consider the documents listed on attached Form PTO/SB/08 and indicate that they were considered by making an appropriate notation on this form.

66. On July 10, 2012, Huawei also submitted a second Information Disclosure Statement to further disclose:

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials ¹	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-2006/0215544	09-2006	ASA ET AL.	
		US-7,440,397	10-2008	TSURUMI ET AL	
		US-2009/0296569	12-2009	RAMALHO RIBEIRO DOS SANTOS ET AL.	

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		CN1604545 A	04-06-2005	ALCATEL SHANGHAI BELL CO LTD	ABSTRACT
		WO 2006/077001 A1	07-27-2006	SIEMENS AKTIENGESELLSCHAFT	YES
		CN1859411 A	11-08-2006	HUAWEI TECH CO LTD	ABSTRACT
		WO 2007/107066 A1	09-27-2007	HUAWEI TECH CO LTD ET AL.	ABSTRACT
		CN101232428 B	05-23-2012	HUAWEI TECH CO LTD	ABSTRACT

NONPATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			Translation ⁶
		International Search Report issued in related Application No. PCT/CN2006/003795 mailed April 12, 2007			Yes
		Office Action dated October 20, 2010, from the USPTO issued in related Application No.: 12/430,451; filing date of March 13, 2009; Hao LONG			
Examiner Signature		Date Considered			

67. On October 17, 2012, the previous power of attorney to the Finnegan law firm was revoked and granted to Leydig, Voit & Mayer, Ltd.

68. On January 9, 2013, the examiner issued a First Action Interview Pilot Program Pre-Interview Communication indicating rejections of the originally filed claims 1-11.

69. On February 8, 2013, a response was filed. The response included amendments to the claims and arguments traversing the rejections under section 112, 103, and double patenting.

70. On February 27, 2013, an interview was held between examiner Gary Mui and applicants' representatives Mark Joy and Weidan Fan. Applicants summarized the interview as follows:

Applicants thank Examiner Mui for his courtesy of holding the interview on February 27, 2013. During the interview, the claims 1, 3 8 and 10 were discussed in the context of the teachings of Yip and Tsurumi. No agreement was reached. Applicants generally agree with the detailed summary of the Examiner Interview provided by Examiner Mui on March 5, 2013.

71. On June 6, 2013, another interview was held between examiner Gary Mui and applicants' representatives Mark Joy and Weidan Fan. During this interview, Applicants' proposed amendments to the claims were discussed.

72. On June 11, 2013, a Supplemental Reply to the Pre-Interview Communication was filed. Included in the reply were amendments to the claims and arguments traversing the rejections under section 112, 103, and double patenting.

73. On January 31, 2014, the PTO mailed a Final Office Action in the examination of the '033 Application rejecting claims under section 102 and 103 in light of newly-cited art, but finding allowable the subject matter of then claims 4, 11, and 17.

74. Applicant filed a response on March 31, 2014 with further amendments and arguments traversing the examiner's rejections.

75. On April 8, 2014, the PTO mailed an Advisory Action stating the amendments do not place the application condition for allowance but would be entered for purposes of Appeal.

76. Applicant filed a Notice of Appeal on April 30, 2014, which was followed up with an Appeal Brief filed on June 30, 2014, appealing the rejection of the claims as set forth in the final rejection of January 31, 2014.

77. On July 18, 2014, the PTO mailed a Notice of Allowance. Claims 1, 2, 4–6, 8, 9, and 11–17 were allowed. The examiner’s reasons for allowance stated: “Claims allowable as indicated by the appeal brief dated June 30, 2014.”

78. On October 20, 2014, a Request for Continued Examination was filed with a third Information Disclosure Statement that further disclosed:

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known		
Sheet	1	of	1	Application Number	13/207,033	
				Filing Date	August 10, 2011	
				First Named Inventor	Long, Hao	
				Group Art Unit	2464	
				Examiner Name	MUI, Gary	
				Attorney Docket Number		
				HW711187		
U.S. PATENT DOCUMENTS						
Examiner Initials	Doc. No.	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
		Application or Patent Number	Kind Code			
A A	20060098571	A1	TAKEFMAN	May 11, 2006		
A B	6973023	B1	SALEH et al.	December 6, 2005		
A C	6625115	B1	IKEDA et al.	September 23, 2003		
A D	20070253330	A1	TOCHIO et al.	November 1, 2007		
A E	7706254	B2	MOORE et al.	April 27, 2010		
A F	20070076590	A1	GALPHIN et al.	April 5, 2007		
FOREIGN PATENT DOCUMENTS						
Examiner Initials	Doc. No.	Foreign Patent Document		Name of Patentee or Applicant	Date of Publication	Translation *
		Office	Application or Patent Number			
A G	EP	1727313	A1	Siemens Aktiengesellschaft	November 29, 2006	
A H	EP	1511243	A1	Alcatel	March 2, 2005	
A I	CN	1859220	A	Sankang Technology Co., Ltd. Hang	November 8, 2006	(b)
A J	CN	1909496	A	Hangzhou Huawei 3Com. Tech.	February 7, 2007	(b)
OTHER - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.				Translation *
A K		1 st Office Action in related Chinese Application No 200710073029.2. (January 8, 2010).				
A L		Written Opinion of the International Searching Authority in related Application No. PCT/CN2007/070864 (January 24, 2008).				(a)
A M		European Patent Office Communication pursuant to Article 94(3) EPC, European search opinion for Application No. 07817055.2 (January 27, 2011).				
A N		Supplementary European Search Report for Application No. 07817055.2. (August 14, 2009).				
A O		International Search Report from P.R. China in International Application No. PCT/CN2007/070864 (January 24, 2008).				

79. On November 26, 2014, the PTO mailed a second Notice of Allowance stating that the IDS was considered, and the claims were allowed for the reasons stated in the previous Notice of Allowance.

80. The '033 Application issued as the '253 Patent on March 31, 2015.

iii. U.S. Patent No. 9,014,151

81. Both U.S. Application No. 11/525,332 and PCT Application No.

PCT/CN2005/001239 contain the following description of the preferred embodiment:

In the preferred embodiments, the size of the ODUGE is 4 x 3824 bytes, and the bit rate is 1244160Kbps±20ppm, half of the payload section rate in the ITU-T Recommendation G.709. The size of the OPUGE, the payload section of the ODUGE, is 4 x 3810 bytes, the payload of the OPUGE is 4 x 3808 bytes with a corresponding bit rate of

$$(3808/3824) \times (1244160 \pm 20\text{ppm}) = (238/239) \times (1244160 \pm 20\text{ppm}) = 1238954.31\text{Kbps} \pm 20\text{ppm}$$

82. In addition, original claim 4 stated:

4. (Original) The method according to Claim 3, wherein the low-rate traffic ODU has 4 x 3824 bytes with a bit rate of 1244160Kbps±20ppm;

85. The '151 Patent also claims foreign priority to application CN 2004 10059163 filed on August 11, 2004. This application contains the following description of the preferred embodiment:

[0091] In an embodiment of the present invention, the ODUGE has a size being 4x3824 bytes and a bit rate specified as 1244160 Kbps±20 ppm, which is half of the rate of the 5 payload area of OPU1 in the ITU-T recommendation G.709. The OPUGE in the ODUGE payload area has a size being 4x3810 bytes a payload being 4x3808 bytes, and a bit rate being
$$(3808/3824) \times (1244160 \pm 20\text{ppm}) = (238/239) \times (1244160 \pm 20\text{ppm}) = 1238954.31\text{Kbps} \pm 20\text{ppm}$$
 correspondingly.

86. During prosecution of the '151 Patent, Mr. Zou signed a declaration identifying himself as the sole inventor for these applications:

As a below-named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **Method and Apparatus for Transmitting Low-Rate Traffic Signal in Optical Transport Network**, the specification of which:

- is attached hereto; and
- was filed on (MM/DD/YYYY) 8-11-2005 as United States Application Serial No. or PCT International Application No. PCT/CN2005/001239, and was amended on (MM/DD/YYYY) _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:	ZOU, Shimin
Citizenship:	Chinese
Residence:	People's Republic of China
Mailing Address (if different):	Huawei Administration Building, Bantian, Longgang District, Shenzhen 518129, Guangdong P.R.China
Signature:	Zou Shimin
Date: 2006.10.27	
<input type="checkbox"/> A petition has been filed for this unsigned inventor.	

87. On March 19, 2009, the examiner mailed the first Office Action in the examination of the '332 Application rejecting all claims.

88. On June 17, 2009, a response was filed by Jeffery L. Clark.

89. On September 17, 2009, the examiner again rejected all claims and the Action was made Final.

90. On November 18, 2009, Grant Rodolph submitted a response.

91. On December 1, 2009, the PTO mailed an advisory action stating the response raised new issues and would not be entered.

92. On January 19, 2010, the examiner again rejected all claims.

93. On April 19, 2010, Grant Rodolph submitted a response. This response included several claim amendments, including the following:

1. A method for transmitting a low-rate traffic signal in an Optical Transport Network (OTN), **wherein the low rate is a rate rank of one gigabit Ethernet,** comprising:

mapping the low-rate traffic signal to be transmitted to a low-rate traffic Optical channel Payload Unit (OPU) of a low-rate traffic Optical channel Data Unit (ODU) signal, **wherein the low-rate traffic ODU has 4 x 3,824 bytes with a bit rate of 1,244,160 Kbps ± 20 ppm;**

generating overhead bytes and filling the overhead bytes in an overhead section of the low-rate traffic ODU, and obtaining the low-rate traffic ODU signal;

conducting cross dispatching for the low-rate traffic ODU signal if equipment has a cross dispatching function; otherwise

multiplexing at least one low-rate ODU signal to an ODUk signal with a rate rank of the OTN, and transmitting the ODUk signal via the OTN.

94. On July 15, 2010, the examiner again rejected all claims.

95. After that rejection, the applicant submitted responses and conducted interviews with the examiner.

96. On May 9, 2011, Grant Rodolph submitted a response including the following claim amendment:

1. (Currently Amended) A method for transmitting ~~only one~~ a low-rate traffic signal in an Optical Transport Network (OTN), comprising:

mapping ~~the one~~ low-rate traffic signal to be transmitted to one low-rate traffic Optical channel Payload Unit (OPU)~~of a low-rate traffic Optical channel Data Unit (ODU) signal,~~ wherein the one low-rate traffic Optical channel Payload Unit (OPU) includes a payload that has a size of 4 x 3,808 bytes and a bit rate about 1238954.31Kbps±20 ppm~~wherein the low-rate traffic ODU has 4 x 3,824 bytes with a bit rate of 1,244,160 Kbps ± 20 ppm and the low-rate is a rate rank of one gigabit Ethernet;~~

generating overhead bytes and filling the overhead bytes in an overhead section of ~~the a~~ low-rate traffic ODU, ~~and obtaining~~wherein the low-rate traffic ODU ~~signal containing~~ contains the one low-rate traffic ~~signal~~ OPU and the overhead section of the low-rate traffic ODU, and the low-rate traffic ODU has 4 x 3,824 bytes with a bit rate of 1,244,160 Kbps ± 20 ppm; wherein, the overhead bytes are is used for end to end management of the one low-rate traffic signal;

multiplexing at least the one low-rate ~~traffic~~ ODU ~~signal~~ to an ODUk signal with a rate rank of the OTN, and

transmitting the ODUk signal via the OTN.

97. On December 22, 2014, after several more exchanges between examiner and applicant, the examiner issued a notice of allowance with the following explanation:

The best prior art references Lahav (US 2003/0048813) and Matsuura (US 2004014638) teach many features of Fiber Optics and Optical Multiplexing. Lahav teaches the conventional Optical Transport Network (OTN) and the standard OTN frame structure. Lahav also teaches the OTN frame having the ODU and OPU sections with standard bytes sizes. Lahav further teaches the concepts of OTN frame divided into multiple parts with OPU Payload Area for loading traffic data in OTN for transmission. However, Lahav does not discuss the specifics of bytes size for ODU and Lahav does not mention anything about the bit rates of the ODU or OPU. Matsuura discusses the bit rate for the OTU element (not ODU and not OPU) of the OTN frame, and with different values of 1.25-Gbits and 2.4488 Gbits/s.

However, the prior art including the cited prior art and the IDS does not disclose at least the specific limitation of the payload for Optical channel Payload Unit (OPU) having a bit rate of 1,238,954.31 Kbps ± 20 ppm and the Optical Channel Data Unit (ODU) having a size of 4 x 3,824 bytes with a bit rate of 1,244,160 Kbps ± 20 ppm, all within the OTN frame. Particularly, the specific bit rate of 1,238,954.31 Kbps ± 20 ppm for OPU and the specific bit rate of 1,244,160 Kbps ± 20 ppm for ODU is not found or fairly suggested in any prior art.

E. Relevant Disclosures Made to the ITU-T

98. [REDACTED]

[REDACTED]
[REDACTED]

99. Over time, Huawei made a number of patent disclosures and other patent-related statements to the ITU.

100. Huawei submitted a GPSLD to the ITU, dated and registered to the ITU on September 8, 2006. Ex. E (Huawei's September 8, 2006 General Patent Statement and Licensing Declaration). On the basis of this submitted statement, the ITU, any party participating in the ITU, and any party considering implementation of ITU standards had the commitment that for any essential patents covered by any proposal made by Huawei, regardless of whichever Recommendation at the ITU, Huawei would be willing to grant RAND licenses.

101. To date, Huawei has submitted seven PSLDs that specifically relate to the G.709 Recommendation (including related Recommendations, such as G.709.1/Y.1331.1; G.709.2/Y.1331.2; G.709.3/Y.1331.3 and G.709.4/Y.1331.4), and the G.8032 Recommendation. Exs. F–L.

102. Huawei submitted declarations wherein it selected the option stating that it would be willing to license any of its patents that are found to be essential to the G.709 standard. This option is available on the ITU-T declaration forms [REDACTED]
[REDACTED]

103. For Recommendation G.709/Y.1331 (12/09), Huawei disclosed that it had relevant patents prior to the adoption of that Recommendation. Ex. F (Huawei's 2008 PSLD).

104. Huawei's patent disclosure for Recommendation G.8032/Y.1344 (03/10) was submitted 1.3 years after the adoption of that Recommendation. Ex. H. The Guidelines anticipate such a situation. Ex. B at 3 ¶ 3.

III. ARGUMENT

A. Conclusion of Law: Huawei's Patents Are Not Unenforceable Due to Waiver, Implied Waiver, Acquiescence, Equitable Estoppel, Unclean Hands, Patent Misuse, Unfair Competition and/or Fraud Based on Standards Activities.

Verizon's theories are premised on the contention that Huawei breached its ITU

disclosure requirements and its commitment to offer FRAND license terms for the Patents-in-Suit. Dkt. 153 at ¶¶ 315–64.

Verizon’s “implied waiver” defense fails because “implied waiver” is not a defense available in a case such as this one, where the plaintiff seeks only money damages and where the patentee did not intend to waive its rights, and where the accused infringer was not led to believe that the patentee had such an intent. The Federal Circuit’s case law suggesting otherwise is infected by fundamental errors of law, and should be overturned.

In *Qualcomm Inc. v. Broadcom Corp.*, the Federal Circuit, for the first time in the history of U.S. patent law, found patents to be unenforceable under the doctrine of “implied waiver.” 548 F.3d 1004, 1020 (Fed. Cir. 2008). In that case, the court declared that an equitable defense of “implied waiver” is available in patent cases where the patentee’s conduct “was so inconsistent with an intent to enforce its rights as to induce a reasonable belief that such right has been relinquished.” *Id.* Although the doctrine of waiver, from which implied waiver derives, had always been understood as a “voluntary relinquishment of a right,” the *Qualcomm* court stated that “implied waiver” need not be intentional, so long as the waiving party’s conduct “was so inconsistent with an intent to enforce its rights as to induce a reasonable belief that such a right had been relinquished.” *Id.* (emphasis added). Moreover, despite its reference to “induc[ing] a reasonable belief,” the court further concluded that an implied waiver could be found even where there was no evidence that the patentee’s actions induced in others a belief that the patentee intended to waive its rights. *Id.* at 1021. And in *Core Wireless Licensing SARL v. Apple Inc.*, the Federal Circuit made this position explicit, holding that “there is no requirement under the implied waiver doctrine that a third party must interpret the patentee’s conduct as constituting a waiver of its rights to enforce the patent; such analysis is more relevant to equitable estoppel.”

899 F.3d 1356, 1367 (Fed. Cir. 2018). The court concluded that where a patentee violated the rules of a standard setting organization, its patents could be held unenforceable even where there was no evidence that the patentee was (a) voluntarily relinquishing its rights, or (b) that others interpreted its behavior that way. *Id.* Thus, in *Qualcomm* and its progeny, the Federal Circuit has transformed a doctrine of contract law, grounded in the express or implied *voluntary* relinquishment of a right, communicated to a counterparty, into a punitive doctrine that permits courts to deprive patentees of their statutory rights for even minor violations of the rules of an SSO, and even in the absence of reliance by another party. Because the Federal Circuit's case law is inconsistent with the patent statute and the historical meaning of the doctrine of implied waiver, it is unsound and should be reversed. While this Court is bound to follow Federal Circuit precedent, those precedents should be revisited and overruled by the Federal Circuit *en banc* or by the Supreme Court, for at least the following reasons.

First, patent law is a creature of statute, and the claims and defenses available to patent owners and accused infringers are defined exclusively by the Patent Act of 1952 (“the 1952 Act”). The defenses available to accused infringers include “noninfringement,” “invalidity” and “unenforceability.” 35 U.S.C. § 282(b)(1). The defense of “implied waiver” is not authorized by statute and the courts have no authority under the 1952 Act to create such a defense.

Second, while the Federal Circuit has interpreted “unenforceability” to include “equitable defenses such as laches, estoppel and unclean hands,” *J.P. Stevens & Co. v. Lex Tex Ltd.*, 747 F.2d 1553, 1561 (Fed. Cir. 1984), “implied waiver” was not an equitable defense that was available to render a patent unenforceable at the time that Patent Act of 1952 was enacted, and thus may not be read into the statute. Indeed, there is no record of implied waiver ever being asserted as a defense in a patent infringement action prior to the 1952 Act, nor is there any

authority showing that the pre-1952 defense of “unenforceability” included implied waiver.

Accordingly, the defense of “unenforceability” cannot be understood to include “implied waiver” under applicable canons of statutory construction. *See Universal Health Servs., Inc. v. United States*, 579 U.S. 1, 8 (2016) (“[I]t is a settled principle of interpretation that, absent other indication, Congress intends to incorporate the well-settled meaning of the common-law terms it uses.”).¹

Third, even if the “unenforceability” provision of the 1952 Act were interpreted to generally permit equitable defenses to claims of patent infringement, the defense of “implied waiver” is not an equitable defense known under the common law, and thus is not authorized by the 1952 Act. Rather, “implied waiver” is a species of the doctrine of “waiver” that arises from the common law of contracts. *See Portsmouth Sav. Bank v. Wilson*, 5 App. D.C. 8 (D.C. Cir. 1894) (discussing a written waiver of the requirements of “demand and notice” in an action at law to recover on a note). At common law, a “waiver” was a *voluntary* relinquishment of a right. *See Clark v. Cap. Credit & Collection Servs., Inc.*, 460 F.3d 1162, 1170 (9th Cir. 2006); *W. Cas. & Sur. Co. v. Brochu*, 475 N.E.2d 872, 878 (Ill. 1985) (“Waiver . . . is consensual and consists of the intentional relinquishment of a known right [and] may be express or implied, arising from acts, words, conduct, or knowledge of the insurer.”); *Pellon v. Conn. Gen. Life Ins. Co.*, 168 A. 701 (Vt. 1933) (equating “waiver” and “estoppel” and holding that “when an insurer with full

¹ The legislative history of the 1952 Act confirms that Congress did not intend to expand the defenses available to accused infringers under the pre-1952 law. In referring to the amendment that added “unenforceability” as a defense, Senator McCarran stated:

The Senate amendments are primarily technical. The addition of the words “or unenforceability” will place in the code this word which has been used in numerous court decisions under the section in question.

98 Cong. Rec. 9249, 9323 (July 4, 1952).

knowledge elects not to take advantage of a forfeiture, he waives it, and cannot assert it in defense, though the insured was not misled to his prejudice") (emphasis added). An "implied waiver" is a waiver that results from conduct rather than words. That is, the waiving party must act in a way that induces the counterparty to believe that the waiving party actually intends to waive its rights. *See Clark v. Capital Credit*, 460 F.3d at 1170 ("Under the generally accepted definition, a waiver is the *voluntary* relinquishment – express or implied – of a legal right of advantage") (emphasis added). Unlike an equitable defense, it does not entail a weighing of equities or an appeal to fairness. And as a legal doctrine grounded in contract law it cannot be the basis for the equitable defense of unenforceability under the 1952 Act.

Fourth, even if "implied waiver" were available as a defense under the 1952 Act, the Federal Circuit's case law applying that doctrine is incorrect because it eliminates all requirements that the waiving party intend (or appear to intend) to waive its rights. As noted above, the doctrine of implied waiver is a species of waiver, which is grounded in an intentional (or apparently intentional) relinquishment of rights. Indeed, all of the pre-1952 case law applying the doctrine makes clear that an implied waiver will only be found where the counterparty was led to believe that the waiving party intended to waive. *See Linnard v. Sonnenschein*, 272 P. 315 (Cal. App. 1928) ("a waiver will be presumed or implied contrary to the intention of the party, if by his conduct *the opposing party has been misled to his prejudice* into the honest belief that such a waiver was intended") (emphasis added); *Torbert v. Montague*, 87 P. 1145 (Colo. 1906) ("Any conduct on the part of the drawer or indorser calculated to, and *actually inducing the holder to, omit serving him* with a regular notice will have the same effect" as an express waiver, emphasis added); *Astrich v. German-American Ins. Co. of New York*, 131 F. 13, 20 (3d Cir. 1904) ("An implied waiver, of a forfeiture, as to evidence an intention to waive the same, or

where the conduct pursued is inconsistent with any other honest intention, than an intention to waive the forfeiture, and the one who has incurred the forfeiture *has been induced by such conduct to act upon the belief that there has been a waiver, and has incurred trouble and expense thereby.*") (emphasis added); *Dunkel Oil v. Independent Oil*, 70 F.2d 967 (7th Cir. 1934) (citing *Astrich* to same effect); *Marine Iron Works v. Weiss*, 148 F. 145 (5th Cir. 1906) ("While a waiver is not in the proper sense of the term a species of estoppel, yet where a party to a transaction induces another to act upon the reasonable belief that he has waived or will waive certain rights, remedies, or objections which he is entitled to assert, he will be estopped to insist upon such rights, remedies, or objections to the prejudice of the one misled."). Indeed, as recently as 2005, the Federal Circuit itself, in reviewing a contract action in the Court of Claims, acknowledged detrimental reliance was an element of "implied waiver." See *Westfed Holdings, Inc. v. U.S.*, 407 F.3d 1352, 1361 (Fed. Cir. 2005) ("Implied waiver may be inferred by conduct or actions that mislead the breaching party into reasonably believing that the rights to a claim arising from the breach was waived"). In sum, the Federal Circuit's precedents holding that an implied waiver requires neither (a) an intent by the patentee to waive its rights nor (b) a reasonable belief by the accused infringer that the patentee had such an intent, lack any support in the common law or the 1952 Act, and should be overturned.

Fifth, even if "implied waiver" were an equitable defense, it would be unavailable in this case because Huawei does not seek any equitable relief in this case. In *SCA Hygiene v. First Quality Baby Prods.*, 137 S.Ct. 954 (2017), the Supreme Court held that the equitable defense of laches was not available to bar patent infringement actions seeking damages within the six-year statute of limitations period. *Id.* In doing so, the court expressly rejected the Federal Circuit's view that the "unenforceability" provision of the 1952 Act automatically made pre-1952

equitable defenses applicable in all cases. *Id.* at 962–63. And given the general pre-1952 rule that equitable defenses were not permitted in suits asserting legal claims, *see Mfrs. Fin. Co. v. McKey*, 294 U.S. 442 (1935) (refusing equitable defense of unclean hands in a breach of contract case brought in a court of equity, and stating that legal rights are not “subject to denial or curtailment in virtue of equitable principles applicable only against one who affirmatively has sought equitable relief”); *N. Pac. R.R. v. Paine*, 119 U.S. 561, 563 (1887) (“In the courts of the United States, to legal actions legal defenses only can be interposed.”), there is no reason to assume that Congress intended an equitable defense of “implied waiver”—a defense never previously applied in a patent case—to become available as a defense to purely legal claims after 1952.

Regarding Verizon’s theory on the ITU disclosure requirements, Verizon alleges that Huawei did not disclose to the ITU-T Study Groups that developed the G.709 and G.8032 Recommendations (or to the ITU-T in general) specific patent applications that Huawei was filing at the same time as the Study Group contributions, in violation of the Patent Policy. Dkt. 153 at ¶¶ 322–40. Though Verizon acknowledges that Huawei agreed to offer its standard essential patents on a RAND basis, Verizon contends that commitment was insufficient to fulfill ITU-T disclosure obligations because specific patent numbers were not identified. *Id.* at ¶¶ 355–56. Verizon thus alleges that it was led to rely upon the standard setting process, including nondisclosures as to Huawei’s intellectual property rights, and that it “would have been free to choose various alternative technologies” absent Huawei’s alleged misconduct. *Id.* at ¶¶ 344–45.

As a threshold matter, the PSLD form, which is the only way to disclose patents to the ITU, only requires disclosure of specific patent numbers if the patent holder refuses to offer licenses to its standard essential patents for free or on a RAND basis. Ex. B 3–4 ¶¶ 3–4, 11. But

that is not the case here; Huawei agreed to offer its standard essential patents on RAND terms.

Exs. F-L. Huawei thus had no obligation to disclose specific patent numbers.

In any event, Huawei did disclose that it had relevant patents to the G.709 standard prior to the adoption of that Recommendation. Indeed, Huawei submitted seven PSLD forms regarding the G.709 and G.8032 Recommendations. *Id.* And while Huawei’s patent disclosure for the G.8032 standard occurred a little over a year after adoption of that Recommendation, the Guidelines contemplate that situation. Ex. B at 3 ¶ 3. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Huawei’s actions are aligned with the requirements of the Patent Policy and the actions of its peers; Verizon has failed to adduce any evidence of intentional, bad-faith conduct. *See id.*

Regarding Verizon’s theory on the FRAND commitment, Verizon alleges that Huawei committed fraud by refusing to license its standard essential patents on a RAND basis by refusing to license on FRAND terms, “offering non-FRAND terms[,] and by refusing to offer any terms whatsoever” Dkt. 153 at ¶ 356.

The Court disagrees. Indeed, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

All of Verizon’s equitable defenses under its standard-setting non-disclosure theory are thus meritless:

Waiver/Implied Waiver. Verizon failed to prove its waiver defenses by clear and convincing evidence.²

As a threshold matter, there is no evidence of actual waiver, i.e., that Huawei communicated to Verizon that they were waiving patent rights during the relevant timeframes. There is also no evidence that representatives from Verizon ever communicated to Huawei that it believed actual waiver had occurred.

Implied waiver is similarly absent. Implied waiver in the standard setting organization context requires proof that the patentee’s conduct “was so inconsistent with an intent to enforce its rights as to induce a reasonable belief that such right has been relinquished.” *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1348 (Fed. Cir. 2011) (quoting *Qualcomm Inc.*, 548 F.3d at 1020). Defendants cannot satisfy this requirement.

The circumstances in this case are not comparable to cases such as *Qualcomm*, where implied waiver was found. In that case, plaintiff’s infringement theory was premised on Broadcom’s implementation of the Joint Video Team (“JVT”) H.264 standard. “Throughout discovery, motions practice, trial, and even post-trial, Qualcomm adamantly maintained that it did not participate in JVT during development of” that standard. *Qualcomm*, 548 F.3d at 1009. Evidence revealed, however, that Qualcomm secretly “participated in the JVT from as early as January 2002, that Qualcomm witnesses . . . and other engineers were all aware of and a part of this participation, and that Qualcomm knowingly attempted in trial to continue the concealment

² *Qualcomm Inc. v. Broadcom Corp.*, 548 F.3d 1004, 1019–22 (Fed. Cir. 2008) (holding that “clear and convincing” is the correct standard for waiver).

of evidence.” *Id.* Plaintiff’s concealment was so egregious in *Qualcomm* that the court found that plaintiff’s goal was to “hold[] hostage the entire industry desiring to practice the H.264 standard by insulating its IPR from the JVT so that the JVT would lose the opportunity to mitigate, if not to avoid, Qualcomm’s IPR in the development” of the standard. *Id.* at 1009–10. In contrast, Huawei is a conspicuous member of the ITU-T, and Maarten Vissers serves as contributor and editor. Indeed, Huawei’s status as a leading contributor to the ITU-T is well-documented. Exs. O-S (Huawei’s ITU-T Study Group Contributions from 2017-2020).

In any event, any belief that Huawei had relinquished its patent rights would have been unjustified because Huawei’s conduct was not inconsistent with an intent to enforce its rights. During the ITU-T standard setting process for G.709, Huawei expressly disclosed that it believed that it held standard essential patents relating to the G.709 standard, and stated that it was prepared to grant licenses on a RAND basis. Exs. F-L. Huawei made a similar disclosure for G.8032. Ex. L. Huawei’s public statements that it was prepared to grant licenses to its standard essential patents on a RAND basis is not only not inconsistent with an intent to enforce its rights; it is also an express notification to the public that it held such rights, and that it intended to enforce them (by not offering to license its patents free of charge). In short, Huawei complied with the ITU-T’s disclosure requirements, and did nothing that would induce a justifiable belief by Verizon that Huawei did not intend to enforce its patents.

Moreover, in [REDACTED], Huawei notified Verizon of potential infringement of the Patents-in-Suit and began license negotiations. Ex. [REDACTED]

[REDACTED]. Although those discussions proved futile (and ultimately occasioned the instant litigation), “this is not the conduct of a party . . . that had waived its right to enforce its patents” *Gilead Scis., Inc. v. Merck & Co, Inc.*, No. 13-CV-

04057-BLF, 2016 WL 3143943, at *23 (N.D. Cal. June 6, 2016). Likewise, [REDACTED]

[REDACTED]

[REDACTED]

“This is not the conduct of a party . . . that has a ‘reasonable belief’ that [Huawei] had waived its patent rights.” *Gilead Scis., Inc.*, 2016 WL 3143943, at *23.

Hynix states that in the standard setting organization context, implied waiver can be shown where “(1) the patentee had a duty of disclosure to the standard setting organization, and (2) the patentee breached that duty.” 645 F.3d at 1348.

Verizon fails on the first prong. As discussed, because Huawei chose the second option on the PSLD form (i.e., to offer licenses to its standard essential patents on a RAND basis), Huawei did not have a duty to disclose specific patent numbers to the ITU-T. Ex. B at 11. And even if Huawei did have a duty of disclosure, the Guidelines do not require disclosure prior to adoption of the Recommendation (*Id.* at 3 ¶ 3), though Huawei did in fact make disclosures regarding the G.709 standard prior to adoption and regarding the G.8032 standard soon after adoption. Exs. F-L.

Acquiescence. “Acquiescence involves the plaintiff’s implicit or explicit assurances to the defendant which induce [] reliance by the defendant.” *Raytheon Co. v. Indigo Sys. Corp.*, No. 4:07-CV-109, 2009 WL 2744057, at *4 (E.D. Tex. Aug. 25, 2009) (citation omitted). The Fifth Circuit has held that an acquiescence defense will fail where the defendant has not provided evidence of undue prejudice (i.e., “economic investments made by the defendant in reliance on promises made by the plaintiff”). *Pennzoil-Quaker State Co. v. Miller Oil & Gas Operations*, 779 F.3d 290, 298 (5th Cir. 2015).

Huawei did not make any explicit assurance to Verizon that it could use Huawei's patents without a license. And no implicit assurances were made either; indeed, after reviewing Huawei's PSLDs, it is apparent that Huawei's standard essential patents were only available via a RAND-compliant license. Exs. F-L; *see also* [REDACTED]

[REDACTED]. In any event, Huawei's licensing negotiations with Verizon made clear that Verizon did not have any assurance, implicit or otherwise, to use Huawei's patented technology without a license.

Even if Huawei had made such assurances, Verizon has presented no actual evidence of reliance or undue prejudice. To begin, [REDACTED]

[REDACTED] And even if Verizon had alleged reliance, Verizon has presented no evidence that it made economic investments based on that reliance. Verizon claims it would have "used alternative technology or at least not expanded its usage of standards compliant [infringing] equipment in its network" had Huawei disclosed its specific patent numbers to the ITU-T. Dkt. 153 at ¶ 362. But Verizon has not made a specific or particularized showing of reliance, undue prejudice, or economic investments based on that alleged reliance. Indeed, Verizon has not shown that it was actually considering an alternative technology and but for Huawei's alleged assurances it decided to not pursue the alternatives. Verizon has not proven its acquiescence defense by a preponderance of the evidence.³

³ *Adv. Tech. Incubator, Inc. v. Sharp Corp.*, No. 2:07-CV-468, 2009 WL 4670435, at *4 (E.D. Tex. Sept. 4, 2009) (stating that "preponderance of the evidence" is the correct standard for ordinary acquiescence).

Equitable Estoppel. In order to establish equitable estoppel, a defendant must show: (1) plaintiff, through misleading words, conduct, or silence, led defendant to reasonably infer that plaintiff did not intend to enforce its patent against it; (2) defendant relied on that conduct; and (3) due to its reliance, defendant will be materially prejudiced if plaintiff is allowed to proceed with its claim. *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1028 (Fed. Cir. 1992) (abrogated on other grounds).

First, the “misleading” conduct Verizon alleges is non-disclosure of specific patent numbers to the ITU-T. As already discussed, this conduct is not “misleading” in the first place; indeed, because Huawei disclosed that it was willing to offer its standard essential patents on a RAND basis, disclosure of specific patent numbers was not required. Ex. B at 11. Moreover, because Huawei disclosed that it possessed standard essential patents relating to G.709 and G.8032, Verizon cannot justifiably claim to have been misled into believing that Huawei had no such patents. Exs. F-L. And even if such conduct were “misleading” on its own, it cannot be misleading in conjunction with the long license negotiation history between these two parties.

■ Disclosure or not, Verizon knew that Huawei intended to assert its patents against Verizon.

Second, Verizon has adduced no evidence that it relied on Huawei’s alleged failure to disclose its patent applications to the ITU-T, and in fact has admitted otherwise. Absent reliance, equitable estoppel may not be found. *A.C. Aukerman Co.*, 960 F.2d at 1028. To show reliance, the alleged infringer must demonstrate that, “in fact, it substantially relied on the misleading conduct of the patentee in connection with taking some action the infringer must have had a relationship or communication with the plaintiff which lulls the infringer into a sense of security in going ahead with building the [infringing product].” *Id.* at 1042–43. Verizon has failed to

identify any relationship or communication which “ lulled ” Verizon into infringement; indeed, after reviewing Huawei’s PSLD forms, any “ sense of security ” would be inapt since the option Huawei chose—to offer its patents on a RAND basis—did not require disclosure of specific patent numbers. *See* Ex. B at 11; [REDACTED]
[REDACTED]
[REDACTED]

Third, Verizon has identified no prejudice it has suffered because of Huawei’s alleged misconduct. Verizon has failed to identify what, if any, economic or evidentiary burdens they have suffered, much less how such burdens were caused by Huawei. *See OPTi Inc. v. Silicon Integrated Sys. Corp.*, No. 2:10-CV-00279, 2013 WL 4494707, at *6 (E.D. Tex. Aug. 19, 2013) (“the Court finds VIA’s claim of economic prejudice lacking, ‘[not] because of a lack of capital investments, but, rather, because [VIA] failed to prove that their increased expenditures . . . were in any way related to actions taken by the patentee.’”) (quoting *Aspex Eyewear Inc. v. Clariti Eyewear, Inc.*, 605 F.3d 1305, 1312–13 (Fed. Cir. 2010)). Verizon has complained that had Huawei disclosed its specific patent numbers, [REDACTED]

[REDACTED] But nowhere does Verizon specify how it would have designed its accused networks differently or how much money it has lost because Huawei did not disclose its patent numbers on the PSLD forms.

Finally, the elements of implied waiver must also be shown to prove equitable estoppel. *Hynix*, 645 F.3d at 1348. As discussed above, Verizon cannot make a case for implied waiver.

Verizon has failed to show equitable estoppel by a preponderance of the evidence.⁴

⁴ *OPTi Inc.*, 2013 WL 4494707, at *5 (stating that “ preponderance of the evidence ” is the correct standard for equitable estoppel).

Unclean Hands. Verizon has failed to prove its affirmative defense of unclean hands because it has not shown, by clear and convincing evidence,⁵ that Huawei intentionally and in bad faith deceived Verizon or the ITU-T, breached its duties to the PTO, or engaged in egregious litigation misconduct.

The inequitable conduct doctrine grew out of the doctrine of unclean hands, and the level of intentionality that must be shown to prove unclean hands is analogous to that required by the Federal Circuit to prove inequitable conduct: the infringer must prove that the patent holder had a “specific intent to deceive.” *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1290 (Fed. Cir. 2011). Under Verizon’s non-disclosure theory, the ITU-T’s Patent Policy does not require disclosure of specific patent numbers when a patent holder agrees to license its standard essential patents on a RAND basis. Ex. B at 11. Huawei had no duty under the Patent Policy to disclose its specific patent numbers, and Verizon has introduced no evidence of any other authority that would require Huawei to do so. Verizon has also failed to adduce any actual evidence that Huawei has defaulted on its promise to be prepared to license its patents on RAND terms. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

Finally, as discussed more fully in Section C, Verizon has failed to provide any evidence that Huawei breach its duties to the PTO. Verizon’s unclean hands defense thus fails.

⁵ *In re Omeprazole Pat. Litig.*, 483 F.3d 1364, 1374 (Fed. Cir. 2007) (stating that “clear and convincing evidence” is the correct standard for unclean hands).

⁶ [REDACTED]

[REDACTED]

Patent Misuse. Patent misuse is an affirmative defense to an accusation of patent infringement, the successful assertion of which “requires that the alleged infringer show that the patentee has impermissibly broadened the ‘physical or temporal scope’ of the patent grant with anticompetitive effect.” *Virginia Panel Corp. v. MAC Panel Co.*, 133 F.3d 860, 868 (Fed. Cir. 1997) (quoting *Windsurfing Int'l, Inc. v. AMF, Inc.*, 782 F.2d 995, 1001 (Fed.Cir.1986)).

Verizon has failed to show the applicability of the patent misuse doctrine to this case. Verizon’s pleadings fail to identify any circumstances under which Huawei has allegedly misused the Patents-in-Suit, and Verizon has adduced no facts which give rise to a viable patent misuse defense. Indeed, [REDACTED]
[REDACTED]

Verizon has not presented clear and convincing evidence to support its patent misuse defense.⁷

Unfair Competition.⁸ A claim for unfair competition can be established only upon a showing that the defendant engaged in “an illegal act . . . which interfered with the plaintiff’s ability to conduct its business.” *Mugworld, Inc. v. G.G. Marck & Assocs., Inc.*, 563 F. Supp. 2d 659, 668 (E.D. Tex. 2007), *aff’d*, 351 F. App’x 885 (5th Cir. 2009). The underlying “illegal act” must at least be an independent tort; breach of contract is not sufficient. *See Taylor Pub. Co. v. Jostens, Inc.*, 216 F.3d 465, 486 (5th Cir. 2000) (“Although the illegal act need not necessarily violate criminal law, it must at least be an independent tort.”); *Parker Barber & Beauty Supply, Inc. v. The Wella Corp.*, No. 03-04-00623-CV, 2006 WL 2918571, at *14 n.15 (Tex. App. Oct. 11, 2006) (“unfair competition includes torts . . . , but not breach of contract”). Furthermore, the

⁷ *Saint Lawrence Commc’ns LLC v. Motorola Mobility LLC*, No. 2:15-CV-351-JRG, 2018 WL 915125, at *6 (E.D. Tex. Feb. 15, 2018) (holding “clear and convincing evidence” is the proper standard for patent misuse).

⁸ As Verizon’s unfair competition defense and counterclaim are based on the same allegations, this section addresses both.

“interfere[nce] with the plaintiff’s ability to conduct its business” element requires evidence of actual loss in sales, profit, or customers. *Mugworld, Inc.*, 563 F. Supp. 2d at 667–68.

Verizon alleges no illegal act or underlying tort on which to base its unfair competition claim. The only potential basis for Verizon’s claim would be Huawei’s alleged non-disclosure of its patents to the ITU-T. But as stated, in committing to offer its standard essential patents on RAND terms (and then actually offering those RAND terms to Verizon during license negotiations), Huawei had no obligation to disclose its specific patent numbers. Ex. B at 11. Verizon’s unfair competition defense thus fails at the first inquiry.

Regardless, Verizon’s unfair competition defense fails as a matter of law because Verizon has no evidence supporting its allegation that Huawei’s alleged fraud interfered with its business. *See Mugworld, Inc.*, 563 F. Supp. 2d at 668. More is required than merely identifying generalized “[REDACTED]

[REDACTED] Dkt. 153 at ¶ 362. Rather, Verizon must prove harm to the operation of the business (e.g., by showing lost sales, lost profits, or lost customers). *See Mugworld, Inc.*, 563 F. Supp. 2d at 667. Here, Verizon offers no evidence to support the claim that the alleged fraud impacted the operation of Verizon’s business. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] throughout this litigation, the only support Verizon has provided for interference with business is that had Huawei disclosed its specific patent numbers, [REDACTED]

[REDACTED] But nowhere does Verizon explain specifically how it would have designed its accused networks differently. Verizon’s lack of evidence dooms its unfair competition defense.

Fraud Based on Standards Activities.⁹ To establish fraud, Verizon must prove that: (a) Huawei “made a material representation that was false”; (b) Huawei “knew the representation was false or made it recklessly as a positive assertion without any knowledge of its truth”; (c) Huawei intended to “induce [Verizon] to act upon the representation”; and (d) Verizon actually and justifiably relied upon the representation and suffered injury as a result. *JPMorgan Chase Bank v. Orca Assets G.P.*, 546 S.W.3d 648, 653 (Tex. 2018). Where alleged fraud results from a failure to disclose information—fraud by nondisclosure—the proof is slightly different and Verizon must instead prove that: (a) Huawei deliberately failed to disclose material facts; (b) Huawei had a duty to disclose such facts to the plaintiff; (c) Verizon was ignorant of the facts and did not have an equal opportunity to discover them; (d) Huawei intended Verizon to act or refrain from acting based on the nondisclosure; and (e) Verizon relied on the nondisclosure, which resulted in injury to it. *Bombardier Aerospace Corp. v. SPEP Aircraft Holdings*, 572 S.W.3d 213, 219–20 (Tex. 2019).

First, Verizon’s fraud defense presumes that Huawei had a duty to identify its specific standard essential patent numbers to the ITU. But as already stated, Huawei had no such duty. Indeed, the Patent Policy and Guidelines unambiguously require that disclosure be done according to the ITU-provided PSLD form, which in turn instructs that providing patent identities is “not required” when a patentee commits to licensing its patents either free-of-charge or on RAND terms. Ex. B at 3, 12. Huawei appropriately completed the ITU PSLD forms in accordance with the instructions that appear on their face. Huawei’s disclosure forms stated that Huawei owned standard essential patents applicable to both the G.709 and G.8032

⁹ As Verizon’s fraud defense and counterclaim are based on the same allegations, this section addresses both.

Recommendations, and that it was prepared to license them on RAND terms. Exs. F-L. No further disclosure was required.

Second, the evidence here shows an absence of justified reliance by Verizon. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Any claim by Verizon that it acted in reliance on a justified belief that Huawei did not own standard essential patents relating to G.709 and G.8032 is simply untenable in view of Huawei's public disclosure, through its public filing of PSLD forms with the ITU, that it did own such essential patents, and Verizon's choice to simply ignore that information in its decision-making processes. *See* Exs. F-L.

And third, Verizon cannot prove that it suffered any legally cognizable injury because of Huawei's alleged wrongdoing. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] While Verizon may well incur costs in defending this litigation, such expenses are not recognized as a legally cognizable injury. *See Burleson State Bank v. Plunkett*, 27 S.W.3d 605, 618 (Tex. App. – Waco 2000) (“attorney’s fees are not recoverable unless such a recovery is provided by statute or a contract between the parties.”).

Verizon has failed to support its waiver/implied waiver, acquiescence, equitable estoppel, unclean hands, patent misuse, unfair competition and fraud based on standards activities defenses.

B. Conclusion of Law: Huawei's Patents Are Not Unenforceable Due to License, Implied License, and/or Exhaustion.

As the breakdown in Huawei and Verizon's licensing negotiations shows, Verizon's actual license and patent exhaustion defenses fail. [REDACTED] *see Bowman v. Monsanto Co.*, 569 U.S. 278, 283 (2013) (holding that “[t]he doctrine of patent exhaustion limits a patentee's right to control what others can do with an article embodying or containing an invention” after the initial *authorized* sale).

Verizon's implied license defense also fails. To prove an implied license defense, Verizon must demonstrate by a preponderance of the evidence both: (1) that the patentee sold to Verizon an article that has no non-infringing uses; and (2) that the circumstances of the sale plainly indicate that a grant of license should be inferred. *Realtime Data, LLC v. T-Mobile USA, Inc.*, 936 F. Supp. 2d 795, 800–01 (E.D. Tex. 2013). Regarding the second element, the court should consider whether: 1) there was an existing relationship between the patentee and infringer; 2) within that relationship the patentee transferred a right to use the patented invention to the defendant; 3) the right was transferred for valuable consideration; 4) the patentee has now denied the existence of the right; and 5) the patentee's statements and conduct created the impression that it consented to the accused infringer making, using, or selling the patented invention. *Id.* (citing *Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d 1571, 1579 (Fed. Cir. 1997)).

First, Verizon has failed to show that Huawei sold to Verizon articles that have no non-infringing uses, in its initial pleadings or otherwise. Dkt. 153 at ¶¶ 308–14; [REDACTED].

And second, Verizon has failed to plead any facts to support any part of the five-element test. Verizon apparently believes it has a right to an implied license because Huawei committed to offer its standard essential patents on FRAND terms and then allegedly refused to do so. But the evidence suggests the contrary: following the general instructions of the PSLD form, Huawei engaged in lengthy license negotiations with Verizon; provided Verizon as many details about its licensing offer as possible in light of Verizon’s refusal to negotiate with an NDA; and then made a RAND-compliant offer to license Huawei’s optical transport standard essential patents for 1.6% of impacted revenue. Ex. B at 11; [REDACTED]. This is not a situation where Huawei initiated this lawsuit without first offering Verizon a license. *See Mondis Tech. Ltd. v. LG Elecs. Inc.*, No. 2:07-CV-565, 2009 WL 901480, at *2 (E.D. Tex. Mar. 31, 2009). Huawei upheld its commitment to the ITU-T, and an implied license defense is thus inappropriate.

C. Conclusion of Law: Huawei’s Patents Are Not Unenforceable Due to Inequitable Conduct.

Inequitable conduct has two elements: (1) materiality, and (2) specific intent to deceive. *Therasense, Inc.*, 649 F.3d at 1287. To prove inequitable conduct, one must establish “that material information was intentionally withheld [or misrepresented] for the purpose of misleading or deceiving the patent examiner.” *Allied Colloids Inc. v. Am. Cyanamid Co.*, 64 F.3d 1570, 1578 (Fed. Cir. 1995). The standard for materiality is that “but for” the nondisclosure of information known to have been material to the patentability of a then-pending claim, the USPTO would not have allowed the patent to issue. *Therasense, Inc.*, 649 F.3d at 1293–96. As

10 [REDACTED]
[REDACTED]

for intent to deceive, it “cannot be inferred solely from the fact that information was not disclosed; there must be a factual basis for a finding of deceptive intent.” *Purdue Pharma L.P. v. Endo Pharms., Inc.*, 438 F.3d 1123, 1134 (Fed. Cir. 2006) (citing *Hebert v. Lisle Corp.*, 49 F.3d 1109, 1116 (Fed. Cir. 1996)). Indeed, the specific intent to deceive must be the “the single most reasonable inference able to be drawn from the evidence” See *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1366 (Fed. Cir. 2008). To be sure, the Federal Circuit has expressed a clear desire to curb the propagation of inequitable conduct claims, which have become an “absolute plague” in patent litigation and “increased adjudication cost and complexity, reduced likelihood of settlement, burdened courts, strained PTO resources, increased PTO backlog, and impaired patent quality.” *Therasense, Inc.*, 649 F.3d at 1289–90.

Verizon asserts an inequitable conduct defense against the ’236, ’253, ’151, ’505, and ’982 Patents, alleging that Huawei intentionally failed to disclose material information (prior art, priority date, or actual inventors) to the USPTO during prosecution of the relevant Patents. Dkt. 153 ¶¶ 368–472. But Verizon has failed to establish clear and convincing evidence of materiality, much less any evidence of specific intent to deceive and defraud the USPTO.¹¹

As for the ’505 and ’982 Patents, Verizon claims that Huawei either intentionally failed to disclose material prior art or intentionally misrepresented the priority date. *Id.* at ¶ 381 (’505 Patent – prior art) and ¶ 409 (’982 Patent – priority date). [REDACTED]

[REDACTED]

[REDACTED]

¹¹ See *Therasense, Inc.*, 649 F.3d at 1287 (“The accused infringer must prove both elements—intent and materiality—by clear and convincing evidence.”).

[REDACTED] [REDACTED]
[REDACTED] Verizon's theories of
inequitable conduct against the '505 and '982 Patents were abandoned and thus fail.

The materiality of the alleged inequitable conduct for the remaining Patents are analyzed in turn:

i. U.S. Patent No. 8,406,236

Verizon claims that the inventors of the '236 Patent were aware of the G.707 (12/2003) prior art reference before filing suit, and that this prior art contains an express teaching of the limitations on which the examiner based the allowance of the claims of the '236 Patent. Dkt. 153 at ¶ 383. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

As for materiality, even taking as true everything about the prior art and its applicability to the claim elements, [REDACTED]

[REDACTED]
[REDACTED]

Indeed, there are multiple references cited in Huawei's first Information Disclosure Statement

¹ [REDACTED]
[REDACTED]

submitted with the application for the '236 Patent referencing the relevant technology, and even a reference to the G.709 standard which incorporated the allegedly undisclosed prior art. [REDACTED]

[REDACTED].

And as for specific intent, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].

ii. U.S. Patent No. 8,995,253

Verizon claims Huawei intentionally failed to disclose material prior art during prosecution of the '253 Patent based on prior art listed in the inventors' Information Disclosure Form ("IDF") but not submitted to the PTO. Dkt. 153 at ¶ 471; [REDACTED].

Regarding materiality, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

In light of Huawei's rebuttal evidence on technological similarity of the allegedly undisclosed references, Verizon fails the materiality prong because it has not shown by clear and convincing evidence that the allegedly undisclosed references were not merely cumulative or redundant of the materials already disclosed. [REDACTED] Verizon has failed to show by clear and convincing evidence that "but for" Huawei's alleged nondisclosure of information, the USPTO would not have allowed the Patent to issue.

iii. U.S. Patent No. 9,014,151

Verizon claims Huawei committed inequitable conduct regarding the '151 Patent by

failing to name the correct Huawei inventor on the patent application, since the alleged true inventor filed an ITU-T technical contribution disclosing the inventions prior to the application.

Dkt. 153 at ¶¶ 395–403; [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

But Verizon’s materiality argument is factually inaccurate. The Chinese application was filed by the named inventor in 2004, whereas the contribution disclosing the inventions did not occur until 2008. [REDACTED] And Verizon’s experts make no other contention to suggest that the ’151 claims lack a written description or are otherwise not entitled to claim the priority dates identified on the face of the Patent. [REDACTED].

Regarding specific intent for all three Patents, Verizon provides no facts to support its claim that Huawei “failed to disclose material information to the USPTO *with the specific intent* to withhold material prior art from the USPTO.” Dkt. 153 at ¶ 383 (’236 Patent), ¶ 455 (similar allegation for ’253 Patent), ¶ 395 (similar allegation for ’151 Patent) (emphasis added). Courts around the country routinely reject inequitable conduct defenses that rely so heavily on speculation as to a patentee’s intent.¹³ Verizon makes a further claim that the “Patent Applicants

¹³ See, e.g., *Virnetx Inc. v. Apple Inc.*, No. 6:12-cv-855, 2016 WL 1117604, at *5 (E.D. Tex. Mar. 22, 2016) (granting summary judgment because the single most reasonable inference was not an intent to deceive); *Exergen Corp. v. Kaz USA, Inc.*, No. 13-10628, 2015 WL 4750843, *4 (D. Mass. 2015) (granting summary judgment “[b]ecause Kaz has not adduced competent evidence to establish the intent element of its inequitable conduct claim . . .”); *Health Grades, Inc. v. MDx Med., Inc.*, No. 11-cv-00520, 2014 WL 2892051, *8 (D. Colo. 2014) (granting summary judgment because “MDx provided no convincing evidence of intent to deceive, and Health Grades offered a reasonable inference that can explain any nondisclosure.”); *KFx Med. Corp. v. Arthrex, Inc.*, No. 11-cv-1698, 2013 WL 10125673, *3–*4 (S.D. Cal. 2013), aff’d, 589 Fed. Appx. 538 (Fed. Cir. 2015) (granting summary judgment and noting that the defense “relies on supposition, not evidence.”); *St. Clair Intell. Prop. Consultants, Inc. v. Acer, Inc.*, No. 09-

knew or should have known the USPTO would consider the information material to its decision to grant the . . . Patent[s].” *Id.* (emphasis added). But this is an argument that the Federal Circuit has flatly rejected. *See Therasense*, 649 F.3d at 1290 (“A finding that the misrepresentation or omission amounts to gross negligence or negligence under a ‘should have known’ standard does not satisfy this intent requirement.”). And even if the Court were to credit [REDACTED]

[REDACTED], Verizon has failed to show that a specific intent to deceive the PTO is the single most reasonable inference to draw. To be sure, [REDACTED]

[REDACTED]
[REDACTED]

D. Conclusion of Law: Huawei’s Patents Are Not Invalid or Ineligible Under 35 U.S.C. § 101.

The Court evaluates subject matter eligibility via a two-step process. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). The first is determining whether the claims are directed to a patent-ineligible concept like an abstract idea. *Id.* If the claims are not directed to an ineligible concept, the inquiry ends—the claims are eligible. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016). If the Court believes that the claims are “directed to” an ineligible concept like an abstract idea, it moves onto the second step. In that part of the analysis, the Court considers whether the claim’s limitations, alone or as an ordered combination, contain an “inventive concept” applied to the identified idea to which the claims are directed—i.e., whether the claims contain “something more” than what was routine or conventional in the

354, 2013 WL 3367319, *6 (D. Del. 2013) (granting summary judgment because defendants “failed to raise a triable issue of specific intent.”); *Carpenter Tech. Corp. v. Allegheny Techs. Inc.*, No. 08–2907, 2013 WL 2250121, *5–*7 (E.D. Pa. 2013) (granting summary judgment because even assuming materiality, there was insufficient evidence of an intent to deceive).

industry at the time of the invention. *Alice*, 134 S. Ct. at 2355. If so, the claims are eligible.

Determining subject matter eligibility can call for a number of factual determinations in both steps of the analysis. *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1008 (Fed. Cir. 2018) (relying on articles at step 1); *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018) (“Aatrix Software I”) (describing procedure for evaluating pleadings at step 2).

i. The ’982 Patent’s Claims Are Directed Towards an Improvement to OTN Systems, Not an Abstract Idea.

Determining whether a claim is directed to an abstract idea is a “meaningful” step. *Enfish*, 822 F.3d at 1335. It is not sufficient that claims “involve” an abstract idea because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012)). To make this determination, courts typically look to the claims as well as the intrinsic evidence, including prosecution history. *See, e.g., Enfish*, 822 F.3d at 1362–63; *Data Engine*, 906 F.3d at 1008 n.2.

[REDACTED]

[REDACTED]

[REDACTED]. The ’982 Patent recites a “method for processing data in an Optical Transport Network (OTN)” by “mapping . . . a . . . LO ODU[] signal into a payload area of an . . . ODTU signal in groups of M bytes,” “encapsulating overhead information to an overhead area of the ODTU signal,” and “multiplexing the ODTU signal into the HO OPU.” Claim 1. This claim is directed to a non-abstract improvement to OTN systems. By providing a flexible mapping and multiplexing procedure, the ’982 Patent enables more efficient designs for OTN systems. In particular, it provides that the OTN mapping process is able to scale with higher bit

rate signals, i.e., as M increases mapping granularity increases. [REDACTED]

In analyzing *Alice* step one, this Court has also looked to whether a method can be performed in the human mind. *Luminati Networks Ltd. v. Teso LT, UAB*, No. 2:19-CV-00395-JRG, 2021 WL 602506, at *5 (E.D. Tex. Feb. 16, 2021). Here, the human mind cannot practically map LO ODU signals to ODTU signals in groups of M bytes as recited in the claims and then multiplex those signals into a HO OPU. This is because the claims are directed towards OTN communication methods and systems that are necessarily tied to physical communications systems, not abstract ideas. [REDACTED].

ii. Verizon Has Failed to Establish the Lack of an Inventive Concept.

To the extent the Court believes the claims are directed only to the idea of converting data from one format to another using a mathematical formula, and that this idea is within the realm of the abstract, Huawei’s claims are still not invalid or ineligible under 35 U.S.C. § 101. Even inventions “directed to” abstract ideas are patent eligible if the claims contain limitations on any abstraction that “involve more than the performance of well-understood, routine, and conventional activities previously known to the industry.” *Aatrix I*, 882 F.3d at 1128 (quotations and citations omitted). Unless contradicted by the patent specification itself, the Court must accept any factual allegations about the nonconventionality of a limitation or combination of limitations as true. *Aatrix I*, 882 F.3d at 1125; *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1356 (Fed. Cir. 2018) (“Aatrix II”) (Moore, J., concurring in denial of petition for rehearing en banc, joined by Dyk., J., O’Malley, J., Taranto, J., and Stoll, J.) (reasoning that a pleading-based dismissal is appropriate only where specification admits that an alleged inventive concept was conventional).

[REDACTED]. But Verizon's expert makes no mention of the fact that the claims require limitations such as mapping by a processor, specialized LO ODU and HO OPU signals, and multiplexing. [REDACTED]. And the '982 claims are not present in or rendered obvious by the prior art. *Id.* at ¶ 179. This is confirmed by the fact that Huawei contributed the invention of the '982 Patent to the G.709 standard, and the members agreed to include this technology in the standard. [REDACTED]

Verizon has failed to establish invalidity or ineligibility under 35 U.S.C. § 101 by clear and convincing evidence.¹⁴

E. Conclusion of Law: Huawei's Claims for Relief and Damages Are Not Limited by 28 U.S.C. § 1498.

28 U.S.C. § 1498 protects government contractors from patent infringement liability where the infringement occurred under the authorization and consent of the government entity. *See Zoltek Corp. v. U.S.*, 672 F.3d 1309 (Fed. Cir. 2012).

Verizon has failed to provide any evidence that Verizon's accused instrumentalities were sold to the United States government. Absent evidence of such sales, Huawei's claims for relief and damages are not limited by 28 U.S.C. § 1498.

F. Conclusion of Law: Huawei's Case Against Verizon is an Exceptional Case Justifying an Award of Attorneys' Fees Under 35 U.S.C. § 285.¹⁵

The only constraint on award of attorneys' fees under 35 U.S.C. § 285 is that the case be exceptional. *Iris Connex, LLC v. Dell, Inc.*, 235 F. Supp. 3d 826, 842 (E.D. Tex. 2017).

¹⁴ *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018) (holding that to support a finding of invalidity, a defendant has the burden to establish all facts "pertinent" to the analysis by clear and convincing evidence).

¹⁵ This section addresses both Huawei's claim of an exceptional case and Verizon's defense of a lack thereof.

Exceptionality is determined on a case-by-case basis, considering the totality of the circumstances. *Id.* The standard is simple: “[a]n exceptional case ‘is simply one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.’” *Id.* (citation omitted). Factors for exceptionality include, but are not limited to, “frivolousness, motivation, objective unreasonableness (both in the factual and legal components of the case) and the need in particular circumstances to advance considerations of compensation and deterrence.” *Id.* (citation omitted). The intent behind allowing attorneys’ fees in patent cases is one of fairness and substantial justice. *Id.* at 845.

Throughout Huawei’s relationship with Verizon, Verizon has engaged in numerous actions that meet the standard for exceptionality. To name a few:

a. [REDACTED]

[REDACTED]

[REDACTED]

b. [REDACTED]

[REDACTED]

[REDACTED]

c. After Huawei filed suit, Verizon responding by publishing a press release with racial undertones. Ex. BB (Verizon February 6, 2020 Press Release).

d. [REDACTED]

[REDACTED]

16 [REDACTED]

17 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Huawei has shown by clear and convincing evidence that this is an exceptional case warranting attorneys' fees under 35 U.S.C. § 285.¹⁸

G. Conclusion of Law: Huawei's Conduct at the ITU is Compliant with Swiss Law, which Applies to the ITU Patent Policy.

- i. Swiss Law Applies to the ITU Patent Policy, which is the Basis for Verizon's SSO/RAND-Related Claims and Defenses.

Regardless of Verizon's styling of its claims and defenses, “[c]learly, the duties [Verizon] alleges [Huawei] violated were imposed by contract, not by law.” *See El Paso Mktg., L.P. v. Wolf Hollow I, L.P.*, 383 S.W.3d 138, 142 (Tex. 2012). “Tort obligations are in general obligations that are imposed by law—apart from and independent of promises made and therefore apart from the manifested intention of the parties—to avoid injury to others.”” *Sw. Bell Tel. Co. v. DeLaney*, 809 S.W.2d 493, 494 (Tex. 1991) (citations omitted). “Accordingly, in determining whether an action sounds in tort or contract, we look to the source of the duty allegedly violated and the nature of the claimed loss.” *El Paso Mktg.*, 383 S.W.3d at 142–43. Here, the ITU Patent Policy forms the core of all the allegations that Verizon has pled in

¹⁸ See *Qualcomm Inc.*, 548 F.3d at 1026 (“An exceptional-case finding must be established by clear and convincing evidence.”).

connection with the equitable doctrines underlying its counterclaim and affirmative defense. *See* Dkt. 153 at ¶¶ 315–64, 490–517. In particular, with respect to its unenforceability defense, Verizon alleges that Huawei violated duties arising out of the ITU Patent Policy.¹⁹

Swiss law applies to Verizon’s SSO-related claims and defenses. Indeed, Verizon agrees that Swiss law applies, at least in the context of breach. Dkt. 304 (Verizon’s Opposition to Huawei’s Motion for Summary Judgment of Verizon’s Breach of Contract Counterclaim) at 12 (“The parties agree that Swiss law governs Verizon’s breach of contract claim.”). Texas has adopted the Restatement approach for conflicts of laws rules governing contract claims in the absence of an express choice of law by the parties. *See Maxus Expl. Co. v. Moran Bros.*, 817 S.W.2d 50, 53 (Tex. 1991); *see also* Restatement (Second) of Conflict of Laws § 188. Even if federal common law choice of law rules apply, however, “[b]oth lead to the same conclusion. Texas law and the federal common law of conflicts rely upon the Restatement (Second) of Conflict of Laws.” *See Valdez v. Cap. Mgmt. Servs., LP*, No. CIV.A. B:09-246, 2010 WL 4643272, at *8 (S.D. Tex. Nov. 16, 2010) (citations omitted). Under the Restatement approach, the law of the state with the “most significant” relationship to the parties and transaction applies, taking into account “(a) the place of contracting, (b) the place of negotiation of the contract, (c) the place of performance, (d) the location of the subject matter of the contract, and (e) the domicil, residence, nationality, place of incorporation and place of business of the parties.” *See Maxus*, 817 S.W.2d at 53; *see also* Restatement (Second) of Conflict of Laws §§ 188(1)–(2), 6.

¹⁹ *See Sw. Bell*, 809 S.W.2d at 494 (“Conversely, if the defendant’s conduct—such as failing to publish an advertisement—would give rise to liability only because it breaches the parties’ agreement, the plaintiff’s claim ordinarily sounds only in contract.”); *El Paso Mktg.*, 383 S.W.3d at 143 (“The gist of Wolf Hollow’s claims is not that Enterprise failed to act as a reasonable pipeline should have, which is the liability standard for negligence, but that it violated specific obligations that might or might not be unreasonable apart from the parties’ agreements.”).

Here, Switzerland has the most significant relationship to both the parties and the transaction at issue (*i.e.*, the ITU Patent Policy). The ITU is a UN agency with its headquarters in Switzerland.²⁰ As to the other parties at issue, Verizon is a Delaware corporation with its principal place of business in New York. *See* Dkt. 27 at ¶ 2; Dkt. 153 at ¶ 2. Huawei is a Chinese corporation with its principal place of business in China. *See* Dkt. 27 at ¶ 1. Both Verizon and Huawei are members of the ITU.²¹ Thus, the ITU, which is headquartered in Switzerland, is the most significant party to the transaction at issue because the ITU’s Patent Policy is the contract and because the ITU lists two other relevant parties (Verizon and Huawei) as its members. As such, the contracting, negotiations, and performance of ITU’s Patent Policy are most heavily centered in Switzerland.²²

Switzerland also has the greatest interest in ensuring that parties do not take advantage of its laws for purposes of negotiating and entering into contracts in Switzerland and with Swiss organizations and then skirting the application of Swiss law when the consequences are perceived to be unfavorable. *See* Restatement (Second) of Conflict of Laws § 188, cmt. c. Additionally, the application of Swiss law serves to protect the justified expectations of Switzerland and the parties that Swiss law will apply to govern a contract entered into in Switzerland with a Swiss organization. *See* Restatement (Second) of Conflict of Laws § 188, cmt. b (“Protection of the justified expectations of the parties is the basic policy underlying the field of contracts.”); *see also* Restatement (Second) of Conflict of Laws § 6(d)–(e), cmt. g (explaining importance of protecting justified expectations). Moreover, the application of Swiss

²⁰ *See* Ex. GG (“About ITU”); Ex. HH (ITU – “Contact Us”).

²¹ To become a member, an organization must apply to the ITU. *See* Ex. II (“Become a Member – My ITU”).

²² *See Teas v. Kimball*, 257 F.2d 817, 823–24 (5th Cir. 1958) (“. . . the focus of the contract was so centered in Texas that its validity should be determined by the laws of contract of that state.”).

law ensures the certainty, predictability, and uniformity of results in analyzing Swiss contracts entered into by sophisticated companies with a sophisticated Swiss organization. *See Restatement (Second) of Conflict of Laws § 6(f), cmt. i* (explaining importance of predictability and uniformity of result). In particular, if it is not recognized that Swiss law should be applied to disputes based on duties arising from the ITU’s Patent Policy, then whenever a party brings an action in a given forum alleging that an ITU member failed to abide by the same ITU’s Patent Policy, a potentially different country’s or state’s law would apply to issues relating to the same Policy. This outcome would run afoul of the Restatement’s § 6 choice of law principles.

Plainly, Switzerland has the greatest interest of any other potential state or nation as it has the most contacts and the most significant contacts to the ITU’s Patent Policy at issue. *See Restatement (Second) of Conflict of Laws § 188, cmt. e* (explaining that important contacts in determining the state of the most significant relationship assume greater importance when combined with other contacts in the same state); *see also Restatement (Second) of Conflict of Laws § 6(c)*. Accordingly, Swiss law applies to Verizon’s equitable doctrines relating to the ITU Patent Policy based on Huawei’s alleged breach of the ITU’s Patent Policy.

Even if Verizon’s unenforceability counterclaim was somehow viewed as sounding in tort, Swiss law would still apply. Texas has adopted the Restatement’s “most significant relationship” test under §§ 6 and 145 for tort claims. *See Gutierrez v. Collins*, 583 S.W.2d 312, 318 (Tex. 1979). Under this approach, Switzerland has the most significant relationship to both the parties and the occurrence of the alleged harm or injury. The analysis of the party contacts above largely applies under the section § 145 analysis. Under § 145, there is a consideration of the place where the relationship of the parties is centered. Given that Verizon alleges that it was harmed by Huawei’s alleged failure to disclose its application to the ITU pursuant to the Patent

Policy, the parties' membership and association with the ITU is the center of their relationship. And the ITU is in Switzerland. The above § 6 analysis of choice of law principles pointing to Switzerland's greater relative interest than other states also similarly applies here.

ii. Application of Swiss Law.

Under Swiss law, Huawei's commitment to the ITU does not create a license contract or pre-contract between Huawei and potential infringers, and does not place requirements on Huawei's opening offers to license.

1. *Huawei voluntarily limits, to a certain extent and under certain conditions, its right to seek an injunction against Verizon.*

Huawei's PSLD RAND-commitments are properly viewed under Swiss law as unilateral contracts with the ITU for the benefit of third-party implementers. According to the PSLD form, Huawei commits to the ITU and to third party implementers to "*be prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO, or IEC.*" Ex. B at 11. The actual content of the obligations imposed on Huawei resulting from the PSLD form is not clearly defined. Accordingly, to determine the contours of Huawei's obligations, the PSLD commitment requires interpretation as to scope and extent.

Where the Swiss court cannot assess the actual intent of the declaring party or parties, it will interpret the statement (or reciprocal declarations in a contract) in accordance with the "principle of trust" or "theory of trust" (*principe de la confiance / théorie de la confiance*):

If the real intent of the parties cannot be established or if their intimate wills diverge, the judge must interpret the statements made and the conduct according to the principle of trust; he must therefore consider how a statement or conduct could be

understood in good faith in light of all the circumstances; the theory of trust thus makes it possible to impute to a party the objective meaning of his statement or conduct, even if it does not correspond to his intimate will. The application of the principle of trust is a question of law that the Federal Supreme Court is free to examine (art. 106 para. 1 FSCA); however, in order to decide this question, it must rely on the content of the expression of will and on the circumstances, whose constatation are to be assessed as facts.

ATF 135 III 410, point 3.2. Accordingly, a Swiss court would have to assess the actual meaning of these RAND commitments, starting from the text of the PSLD form and then considering the context in which these RAND commitments were made. In summary, the RAND commitments are to be interpreted from the point of view of an honest, reasonable, and good faith addressee, at the time the PSLD forms are received by the addressee, on the basis of the circumstances known to the addressee.

Though Swiss courts have yet to address the interpretation of RAND commitments to the ITU, under the principle of trust analysis discussed above, a Swiss court would acknowledge that by making a RAND commitment via the PSLD form, Huawei commits to a voluntary limitation of its non-neutral competition rights, such as the right to seek an injunction. [REDACTED]

[REDACTED]. That said, this voluntary limitation is conditioned upon the alleged infringer expressing a willingness to negotiate a RAND-compliant license with Huawei in good faith. To be sure, the limitation does not limit Huawei's ability to sue for patent infringement, which would create a risk-free boycott of licensing negotiation that would increase the likelihood of a patent hold-out. If there were no threat of a suit, or indeed if Huawei were prohibited from bringing any suit, Verizon would have no incentive to agree to any of Huawei's offers and could

instead keep the negotiations going indefinitely. Such a scenario would not necessarily involve either party breaching their duty of good faith, either, as it is possible for two parties negotiating in good faith to simply not reach agreement.

2. *The RAND commitment does not create a license agreement and hence does not create a contractual obligation for Huawei to license its standard essential patents to accused infringers.*

The unilateral undertaking by the standard essential patent holder to be prepared to grant licenses on RAND terms is not a license agreement and it does not create a license agreement.

To begin, the PSLD forms do not include an offer that can be accepted without modification by implementers to create a contract: the PSLD forms do not include all the objective essential points of a license agreement, and notably do not include the applicable royalty rate or a method to determine the applicable royalty rate. The expression “RAND terms” is not sufficiently specific; indeed, RAND terms are determined on a case-by-case basis. Absent an agreement specifying the “RAND terms,” there is no license agreement, [REDACTED]

[REDACTED] Absent specific identification of the terms, a Swiss court would rather consider that there is no license contract. [REDACTED]

Relatedly, for the RAND commitments to encompass a license, the RAND terms would need to be sufficiently determinable. But RAND terms are by essence of variable geometry, and it is not possible to objectively assess a unique set of RAND terms at the time the RAND commitment is made. [REDACTED] Indeed, RAND Terms may vary with the passing of time, the accused infringer and the type of products or services it provides, the market positions of the accused infringer (manufacturer, distributor, etc.) and, most importantly, the reciprocal position of the standard essential patent holder and the accused infringer within the market.

Finally, the creation of a license contract under Swiss law requires two parties to agree on the terms of the license. [REDACTED] Thus, Huawei cannot have an obligation to unilaterally enter into a license agreement with an unwilling party. And even when two willing parties are negotiating in good faith, it is possible that they will not reach an agreement. In that situation, Huawei cannot be legally obligated to conclude a license.

3. *The RAND commitment also does not create a pre-contract, or a contract-to-contract.*

The RAND commitment also does not create a pre-contract because the essential terms of the individual licenses with implementers are not agreed upon: they are neither determined nor determinable from the language of the PSLD form as described above. Key terms of these would-be licenses, such as the royalty-rate and royalty-base, are missing from the declarations and would be part of the negotiations left to the parties, should they wish to negotiate; Verizon agrees. [REDACTED]

4. *The RAND commitment does not place requirements on opening offers, only that negotiations occur in good faith.*

While the RAND commitment mandates that the eventual license be on RAND terms, it does not place a requirement on opening offers. The only requirement is that offers made by either party must follow the principles of negotiating in good faith. ATF 140 III 200, point 5.2.

Under Swiss law, the RAND commitment does not obligate Huawei to make an opening offer that is within the range of what could ultimately be determined to be RAND. [REDACTED]
To be sure, it is reasonable to believe that implementers will be situated differently from one another. For example, some implementers may be suppliers that only sell small components, while others may be service providers that use larger systems. As such, the RAND rates and royalty bases could be different between them. [REDACTED]

Further, a Swiss court would understand that the RAND rates may not already be established until the first license of the patent holder's standard essential patents to a certain category of implementer, making it impossible for a patent holder like Huawei to ensure that its opening offer meets what will be determined in the future as a specific RAND rate. [REDACTED]

Additionally, the publicly available information about a given implementer's products or business may not provide enough information for the patent holder to make a fully informed opening offer. In that situation, under the principles of good faith, the standard essential patent holder would require, and would be entitled to obtain, additional information from the implementer to ensure that its offer is RAND-compliant. Decision 4C.247/2005 of 17 November 2005, point 3.1 ("Thus, each party is obliged to negotiate seriously, in accordance with its true intentions, and to inform the other, to a certain extent, of the circumstances likely to influence its decision to enter into the contract, or to enter into it on specific terms.").

Finally, a Swiss court would understand that creating a legal obligation for the patent holder to make its opening offer RAND-compliant would create liability for any patent holder attempting to license its standard essential patents. [REDACTED] A Swiss court would recognize that this would have an undesirable chilling effect on standard essential patent holders fearful of liability for breaching their obligation any time their opening offer did not match the ultimate RAND agreement. [REDACTED]

Swiss law and the RAND commitment do not obligate Huawei to offer licenses on a per-patent basis. [REDACTED]. Swiss law permits a negotiating party to structure and define the content of its offers any way it chooses, as long as the offer is not manifestly unreasonable in violation of the duty of good faith. [REDACTED] The PSLD forms are silent on this point and therefore do not impose any additional obligation on Huawei.

Indeed, under Swiss law's totality of the circumstances analysis, Huawei did negotiate with Verizon in good faith. Upon review of the negotiation history, a Swiss court would find numerous examples of Huawei's good-faith negotiations:

- a. [REDACTED]
- [REDACTED]
- b. [REDACTED]
- [REDACTED].
- c. [REDACTED]
- [REDACTED].
- d. Huawei's communication with Verizon was prompt and courteous.
- e. [REDACTED]
- [REDACTED].
- f. [REDACTED]
- [REDACTED]
- g. [REDACTED]
- [REDACTED]
- h. [REDACTED]

After a year of negotiations, [REDACTED]

²³ [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] A Swiss court would not view Huawei filing suit as a violation of its duty to negotiate in good faith for several reasons. [REDACTED]. *First*, as previously discussed, a patent holder always has a right to enforce its competition-neutral patent rights. *Second*, Huawei believed that negotiations had broken down and no progress was being made. Negotiations cannot continue in perpetuity and it is understood under Swiss law that the assistance of a court may be needed to enforce a party's patent rights. [REDACTED] *Third*, Huawei did not ask for a preliminary injunction to remove Verizon's products from the market, allowing the parties to continue negotiating free from the asymmetric market pressure that an injunction would force upon Verizon. [REDACTED]. A Swiss court would view the totality of these circumstances and conclude that Huawei met its obligations under its RAND commitment. [REDACTED].

In conclusion, applying Swiss law to Huawei's RAND commitment, (i) Huawei voluntarily limits, to a certain extent and under certain conditions, its right to seek an injunction against Verizon, (ii) the RAND commitment does not create license agreements and hence does not create a contractual obligation for Huawei to license its standard essential patents to accused infringers, (iii) the RAND commitment does not create a pre-contract, and (iv) the RAND commitment does not place requirements on opening offers, only that the parties negotiate in good faith.

H. Conclusion of Law: Verizon's Patents Are Unenforceable Due to Unclean Hands.²⁴

Huawei's unclean hands defense is primarily based on the fact that Verizon failed to disclose the '111 and '288 Patents to the ITU-T, even though it should have under Verizon's interpretation of the standard.

First, Verizon failed to submit a PSLD form despite its contentions that its Patents are required for the optional portion of the G.709 standard. Courts have recognized, when examining the ITU Policy, that “SSOs define a patent as essential even if the patent only reads onto an optional portion of the standard.” *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823-JLR, 2013 WL 2111217, at *10 (W.D. Wash. Apr. 25, 2013). [REDACTED]

²⁴ Because the legal elements are already discussed in the section on Verizon’s unclean hands, waiver, implied waiver, acquiescence, and equitable estoppel defenses, this section focuses solely on application to the facts.

[REDACTED]
[REDACTED]
[REDACTED] Therefore, because Verizon accuses an optional portion of the G.709 Recommendation, Verizon's Patents would be "essential" and carry RAND obligations if its infringement allegations are correct. *Microsoft*, 2013 WL 2111217, at *10.

Verizon has remained adamant that Huawei's Patents should be rendered unenforceable since Huawei made a RAND commitment without also identifying specific patent numbers. [REDACTED]
[REDACTED]. But Verizon has failed to even file a PSLD form on its supposedly standard essential patents, let alone disclose specific patent numbers to the ITU-T. [REDACTED]

Second, and independently, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Verizon's failure to disclose, particularly in light of its interpretation of the ITU Policy against Huawei, is illustrative of Verizon's unclean hands.

I. Conclusion of Law: Verizon's Claims Are Barred by the Statute of Limitations.

Verizon's breach of contract, fraud, and unfair competition counterclaims are barred by the statute of limitations. Swiss law, which applies to Verizon's breach of contract claims, has a 10-year statute of limitations. Art. 127 CO. The statutes of limitations for Verizon's unfair competition and fraud claims are two and four years, respectively. Tex. Civ. Prac. & Rem. Code § 16.003(a) (2019) (providing a two-year statute of limitations for common law torts, including

common law unfair competition); Tex. Civ. Prac. & Rem. Code § 16.004(a)(4) (2020) (providing a four-year statute of limitations for fraud); *see Edmark Indus. SDN. BHD. v. S. Asia Int'l (H.K.) Ltd.*, 89 F. Supp. 2d 840, 847 (E.D. Tex. 2000). Further, the Fifth Circuit has rejected both the discovery rule and the continuing wrong theory for unfair competition (i.e., that the statute of limitations does not begin to run until the last infringing act takes place). *See Edmark Indus. SDN. BHD.*, 89 F. Supp. 2d at 847 n.2, 848 (collecting cases).

Verizon's breach of contract, fraud, and unfair competition counterclaims are partially based on an allegation that Huawei failed to disclose its specific patent numbers to the ITU-T. Dkt. 153 at ¶¶ 499–500. But this alleged conduct occurred in 2008 when Huawei first filed its PSLD form. Ex. F. This alleged conduct is outside the statutes of limitations for all three of Verizon's related claims. And to the extent Verizon relies on a discovery or continuous wrong theory for its breach of contract and fraud claims, [REDACTED]

[REDACTED] Verizon thus had knowledge of Huawei's alleged misconduct since the filing of Huawei's PSLD form in 2008; the statute of limitations has run.

J. Conclusion of Law: The Claims of Verizon's '111 and '288 Patents are Invalid Under 35 U.S.C. § 101 Because They are Directed to Abstract Ideas or Other Non-Statutory Subject Matter.²⁵

Stripped of conventional computer technology, the claims of Verizon's '111 and '288 Patents are merely recitations of the long-extant practice of time recording, performed by humans for centuries. [REDACTED]. Indeed, the claims recite basic timing and recording functionalities that were well-known in the field before the effective

²⁵ Because the legal elements are already discussed in the section on Verizon's 35 U.S.C. § 101 defense, this section focuses solely on application to the facts.

filing dates and the earliest potential priority dates of the asserted patents. [REDACTED]. The use of time stamps to determine latency, as claimed by Verizon's asserted Patents, is merely a previously known abstract idea. [REDACTED]

i. The Claims of Verizon's Asserted Patents Are Directed Toward an Abstract Idea.

The concept of latency measurement, as claimed in the Asserted Patents, was well-known at the time of the '111 and '288 Patents. A POSITA would have been aware of various methods for measuring network delays (latency), including methods disclosed by IEEE 1588 and NTP. The context of such measuring (such as optical transport and networking standards including G.709, SDH, and SONET) were well known at the time. Likewise, use of latency or delay measurement techniques were used in asynchronous networks like Ethernet. While these particular methods may differ in their specifics, each of them is grounded in the same fundamental idea that the '111 and '288 Patents appear to claim: measuring round-trip time by timing how long it takes something to make a round trip. [REDACTED]. Indeed, the claims include extracting and using multiple time stamps to determine the overall round-trip time. Although some of these claims contain elements such as an "overhead portion," "optical channel data unit," "optical channel payload unit," and "optical transport unit frame," the inclusion of those elements would not describe to a POSITA any particular technology that is improved by the claims, but merely what context in which the claimed abstract idea is applied—OTN and, as an example, G.709 networks. Merely limiting an abstract idea to a particular technology or application does not transform an abstract idea into patent-eligible subject matter. *Id.* [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

The image consists of a series of horizontal black bars of varying lengths, arranged vertically. The bars are solid black and have sharp edges. They are positioned against a white background. The lengths of the bars decrease as they move from top to bottom. There are approximately ten bars in total.

Likewise, use of timestamps to measure delay or for use in time synchronization was well understood and routine before the Verizon Asserted Patents. [REDACTED]

Indeed, the asserted claims are vague and broad so as to preempt any use of round-trip delay measurements in OTNs. The Patents contain very little limit as to how the OTN

technologies are used—describing previously well understood, routine, and conventional techniques regarding (1) the transmitting and receiving of OTN frames, (2) that OAM information, such as time stamps, are inserted and extracted from OTN frames, and (3) listing all OTN overhead portions as potential options for this data. Furthermore, no particular algorithm for measuring the round-trip delay from the timestamp values is disclosed or claimed. The Patents provide no algorithms or explanation as to how to do any of the functionality described or claimed. Accordingly, the claims merely recite an abstract idea of measuring round-trip delay and apply it in a well understood, routine, and conventional context, such as the G.709 standard, which cannot transform the idea into a patent-eligible invention. [REDACTED].

As such, the language of the asserted claims, the well understood nature of the prior art, and the inventor’s testimony all support the conclusion that the alleged invention is an abstract idea.

ii. **Verizon’s Claim Elements Are Well Understood, Routine, and Conventional.**

Each of the claim limitations were well understood, routine, and conventional at the time of the alleged priority date of the ’111 and ’288 Patents. [REDACTED]. The differences in the language of the claims do not result in a different outcome with respect to the question of whether the claim limitations were well understood, routine, and conventional for the purposes of patent eligibility. For example, certain claims of the asserted claims of the ’111 and ’288 Patents recite “a receiving module,” “a processing module,” “a generating module,” or “a transmission module,” but such features merely involve the application of conventional computer elements. Verizon’s claim construction expert, Dr. Min, also agrees that each of these “modules” were known and would have been familiar to a POSITA at the time of Verizon’s Patents. Dkt. 85-3, §§VI.D-G. As a specific example, Dr. Min opined that the “corresponding structure” for

the recited “receiving module” “is an ITU-T G.709 network interface.” *Id.* at ¶ 91. Verizon’s expert further conceded that “a POSITA would understand that every G.709 network interface must include, at a minimum, certain structural components, such as a laser (transmit-side), photo sensor (receive-side), frame buffer, and a processor. For example, a POSITA would understand a receiving module in the G.709 network interface context to necessarily include a photo sensor, receive buffer, and processor.” *Id.* at ¶ 90; *see id.* at ¶¶ 105, 112.

Indeed, the elements of “overhead portion,” “optical channel data unit,” “optical channel payload unit,” and “optical transport unit frame” were widely known at the time of the Verizon Patents. In particular, the 2003 version of the G.709 standard is admitted as prior art in the Verizon Patents and the standard expressly includes these recited claim structures. Accordingly, these claimed structures would have been not only conventional in the technical field, but standard. And as previously stated, the inclusion of such generic computer elements does not transform an abstract idea into patent-eligible material. [REDACTED].

Verizon’s ’111 and ’288 Patents are invalid under 35 U.S.C. § 101 because they are directed to abstract ideas without an inventive concept.

K. Conclusion of Law: Huawei Had No Duty to Disclose Patent Identities.

Where alleged fraud results from a failure to disclose information—as Verizon alleges here—the plaintiff must prove that: (a) the defendant deliberately failed to disclose material facts; (b) the defendant had a duty to disclose such facts to the plaintiff; (c) the plaintiff was ignorant of the facts and did not have an equal opportunity to discover them; (d) the defendant intended the plaintiff to act or refrain from acting based on the nondisclosure; and (e) the plaintiff relied on the nondisclosure, which resulted in injury to the plaintiff. *Bombardier*, 572 S.W.3d at 219–20.

A critical element of “fraud by nondisclosure” is the requirement that the defendant have had a “duty to disclose” particular information. *Id.* at 219. Whether such a duty exists is a question of law. *Bradford v. Vento*, 48 S.W.3d 749, 755 (Tex. 2001). Texas courts recognize two general relationships in which such a duty arises: (1) a “fiduciary” relationship, where one party has a specific obligation to act solely in the interest of the other party; and (2) a “confidential” relationship, where an extended course of dealings between the parties may have reasonably lead one party to expect the other to disclose material facts. *Bombardier*, 572 S.W.3d at 220. Although its allegations as to duty are hazy, Verizon does not appear to allege either of these relationships exists here, nor would either fit the facts of the case.

Texas courts also recognize a duty to speak is where one party has already made a disclosure of material information, but that disclosure is either false or incomplete, such that further disclosure is necessary to avoid leaving a misleading impression. Specifically, a duty to disclose may arise when the defendant: “(1) discovered new information that made its earlier representation untrue or misleading; (2) made a partial disclosure that created a false impression; or (3) voluntarily disclosed some information, creating a duty to disclose the whole truth.” *Id.* Here too, the facts do not support any duty by Huawei to make a further disclosure. Huawei appropriately completed the ITU PSLD forms in accordance with the instructions that appear on their face. Huawei’s disclosure forms clearly stated that Huawei owned SEPs applicable to both the G.709 and G.8032 Recommendations, and that it was prepared to license them on RAND terms. No further disclosure was required.

Rather than identify any basis in Texas law for Huawei’s duty, Verizon instead appears to contend that the duty to disclose arises out of the ITU Patent Policy. As an initial matter, even if ITU policy were construed as a contract, Verizon’s contentions are insufficient because a mere

contractual obligation does not create a “duty to disclose” that would support a fraud by nondisclosure claim. Rather, a “fiduciary” or “confidential” relationship is required. *Id.*

Even assuming ITU policy could create a duty under Texas law, Verizon offers no evidence that ITU rules required disclosure of patent identities where (as here) a party selects a licensing option that makes patents available without undue constraints. Exs. F-L. To the contrary, the Policy and Guidelines unambiguously **require** that disclosure be done according to the ITU-provided PSLD form, which in turn instructs that providing patent identities is “**not required**” when a patentee commits to licensing its patents either on free-of-charge or RAND terms. Ex. B at 3 ¶ 3, 11. Verizon’s evidence is not to the contrary. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] But *elective* identification of specific patents by *some* companies is entirely beside the point, since the ITU Policy and form require specific identification only when a company refuses to license its SEPs. Moreover, [REDACTED]

[REDACTED]

[REDACTED] *See Qualcomm Inc.*, 548 F.3d at 1012 (looking to “participants’ understanding of the meaning” of SDO’s policies to determine obligations of SEP holders). [REDACTED]

[REDACTED]

[REDACTED]. Under Verizon’s fraud theory, this means that nearly half of the organizations at the ITU have always committed fraud and the vast majority have committed fraud at some point. To the contrary, the facts—the

plain language of the Policy and the consistent behavior of ITU participants—compel the conclusion that the ITU Policy does not require what Verizon claims.

Similarly, Verizon fails to adduce any evidence that the ITU Policy requires *any* disclosure by participants regarding patents during technical meetings, much less disclosure of specific patent identities. The text of the Policy contains no such requirement. Rather, the Policy explains that disclosures *must* be made using the PSLD form. Here too, the evidence of participants' actual practice confirms this understanding. *See Qualcomm*, 548 F.3d at 1012. ■

Thus, the evidence reveals that Huawei's disclosure obligation under ITU Policy was limited to completing the ITU-provided PSLD form in compliance with its instructions. To the extent Huawei owed any duty at all, the scope of that duty certainly did not require identification of specific patents, whether on a PSLD form or in a technical meeting. *See Bradford*, 48 S.W.3d at 755.

IV. CONCLUSION

For the foregoing reasons, Huawei respectfully requests the Court make the findings of fact and enter the conclusions of law.

Dated: May 13, 2021

Respectfully submitted,

By: /s/ Jason D. Cassady
Bradley W. Caldwell
Texas Bar No. 24040630
Email: bcaldwell@caldwellcc.com
Jason D. Cassady

Texas Bar No. 24045625
Email: jcassady@caldwellcc.com
John Austin Curry
Texas Bar No. 24059636
Email: acurry@caldwellcc.com
Justin Nemunaitis
Texas Bar No. 24065815
Email: jnemunaitis@caldwellcc.com
CALDWELL CASSADY CURRY P.C.
2121 N. Pearl St., Suite 1200
Dallas, Texas 75201
Telephone: (214) 888-4848

Gregory P. Love
Texas Bar No. 24013060
greg@lovetrialfirm.com
LOVE LAW FIRM
P.O. Box 948
Henderson, Texas 75653
Telephone: (903) 212-4444

David M. Barkan
California Bar No. 160825
barkan@fr.com
FISH & RICHARDSON P.C.
500 Arguello Street, Suite 500
Redwood City, CA 94063
Telephone: (650) 839-5070

*Attorneys for Plaintiff Huawei Technologies Co.
Ltd., and Counterclaim Defendants Huawei
Technologies USA, Inc., and Futurewei
Technologies, Inc.*

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was served on all counsel via electronic mail on May 13, 2021.

/s/ Jason D. Cassady
Jason D. Cassady

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

The undersigned certifies that the foregoing document is authorized to be filed under seal pursuant to the Protective Order submitted in this case.

/s/ Jason D. Cassady
Jason D. Cassady